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VOL. XLIV.
No. 21.

THE FULL TABLE OF CONTENTS WILL BE FOUND ON PAGE 416.

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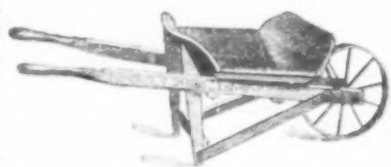
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INDEX See Page 32**Accountants.**

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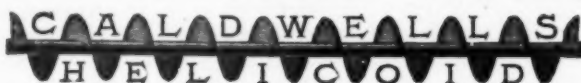
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INDEX See Page 32

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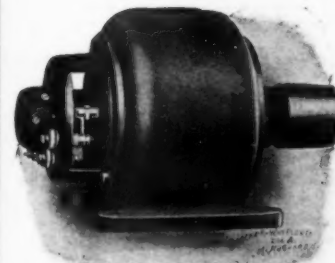
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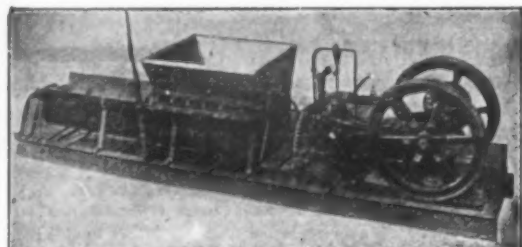
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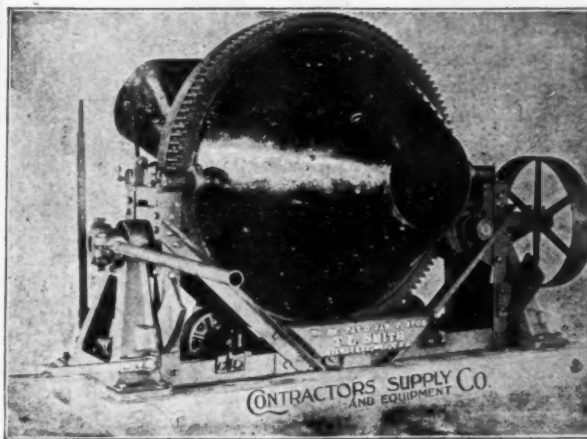
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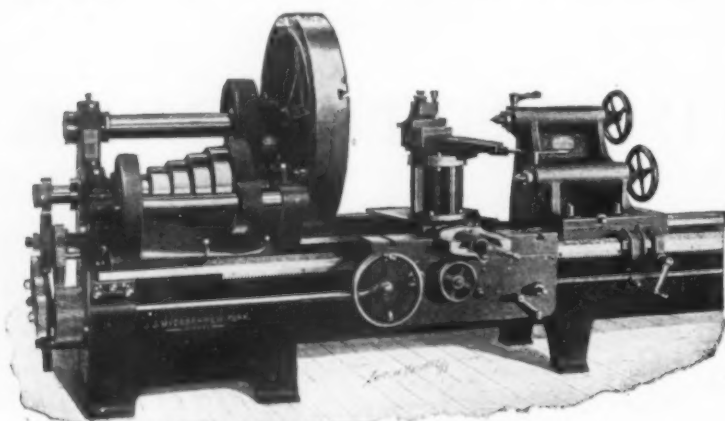
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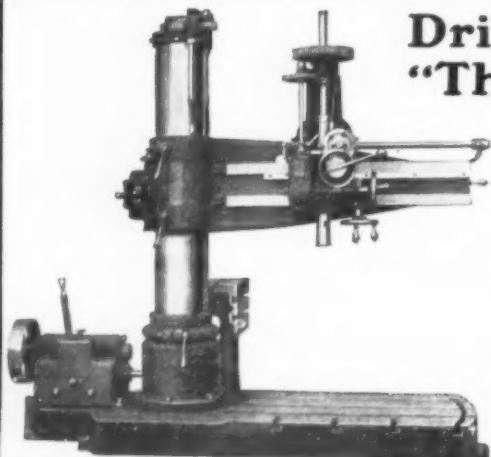


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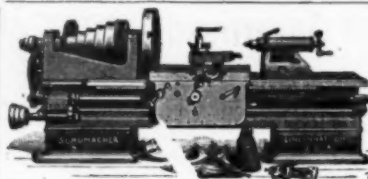


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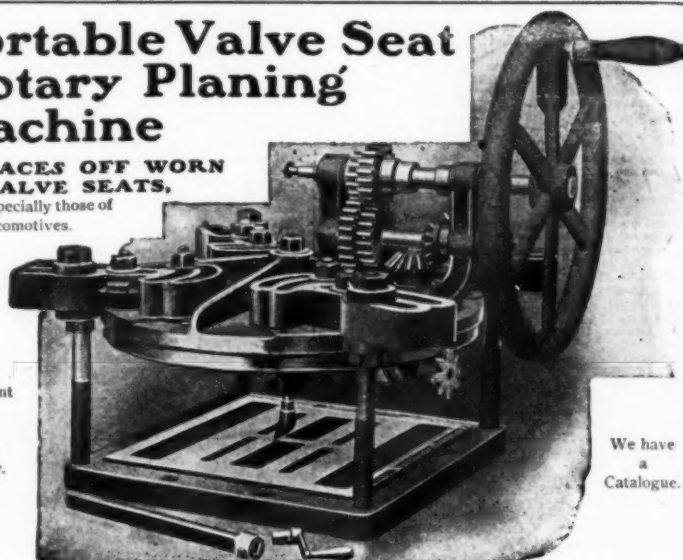


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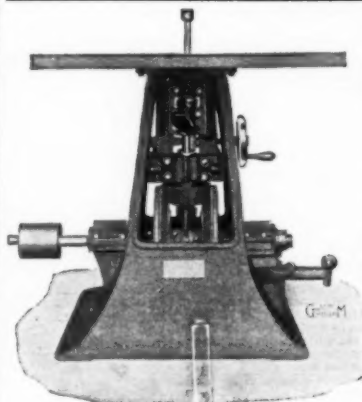
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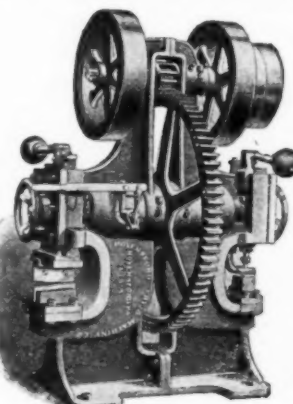
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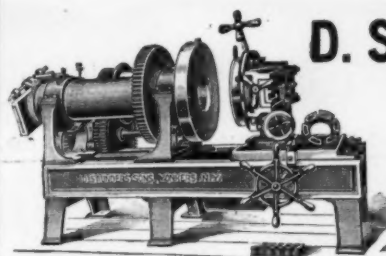
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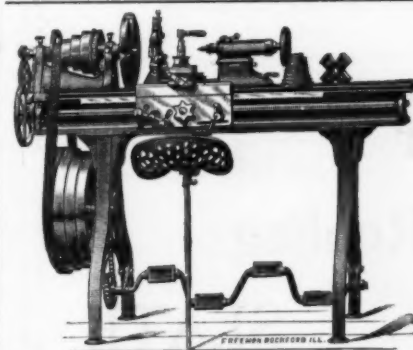
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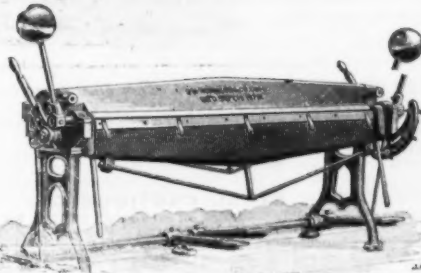
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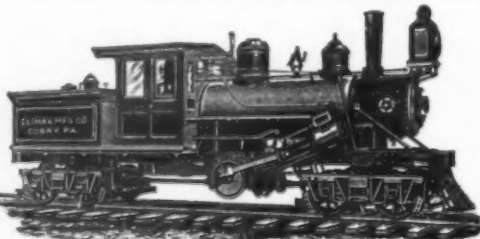
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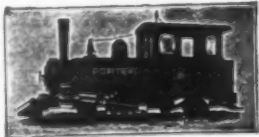
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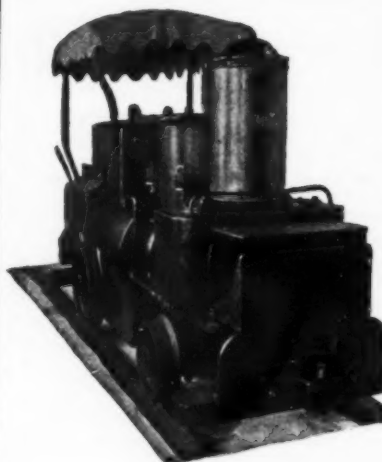
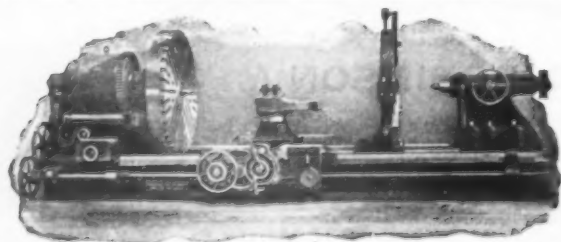


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Classified Index of Articles Advertised

FOR ALPHABETICAL
INDEX See Page 32.

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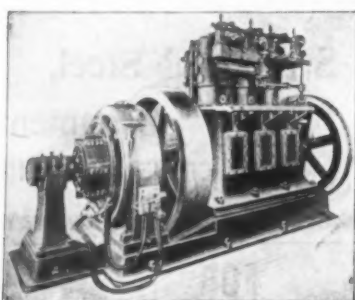
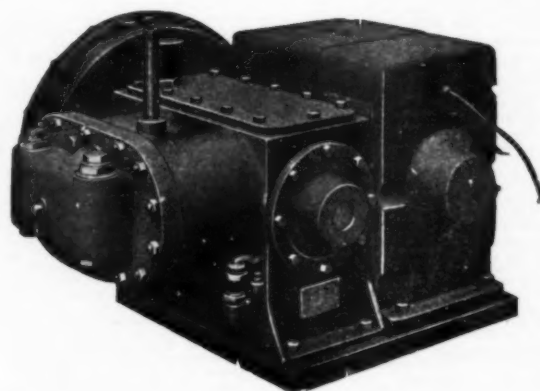
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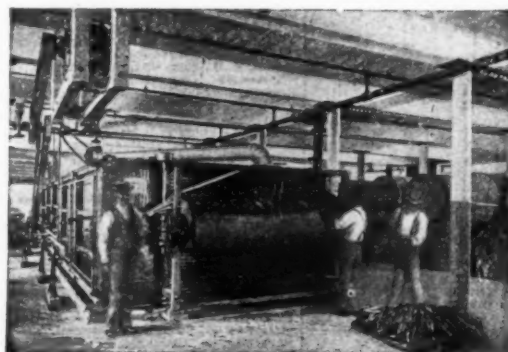
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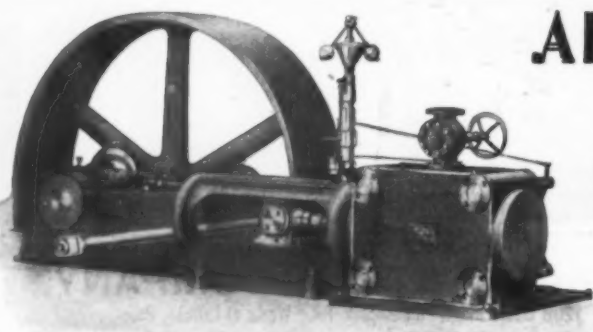
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Classified Index of Articles Advertised

For ALPHABETICAL
INDEX See Page 32

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Rutter, C. H., Easton, Pa.
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Steel Rail Supply Co., The New York, N. Y.
Stringfellow & Webster, Richmond, Va.
Union Rail Co., Pittsburg, Pa.
Western Supply & Mfg. Co., East St. Louis, Ill.
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Cortright Metal Roofing Co., Philadelphia, Pa.
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Penn Metal Ceiling & Roofing Co., Phila., Pa.
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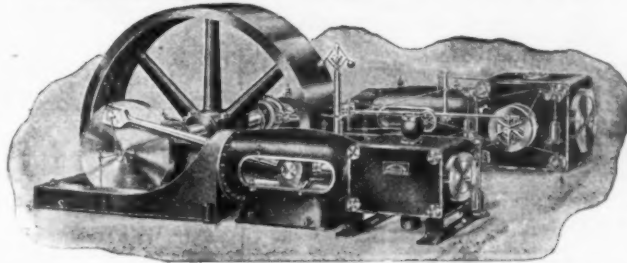
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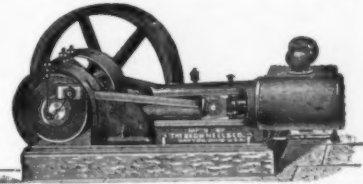
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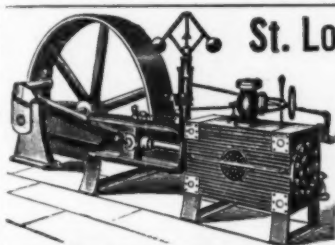
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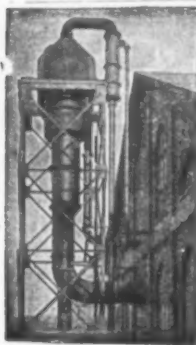
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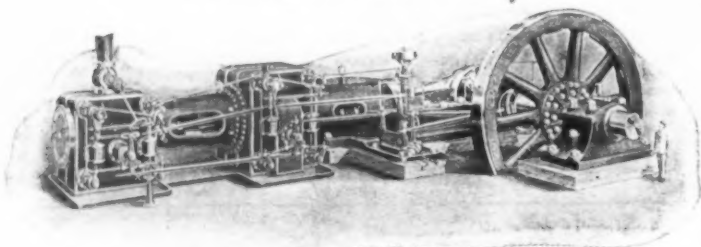
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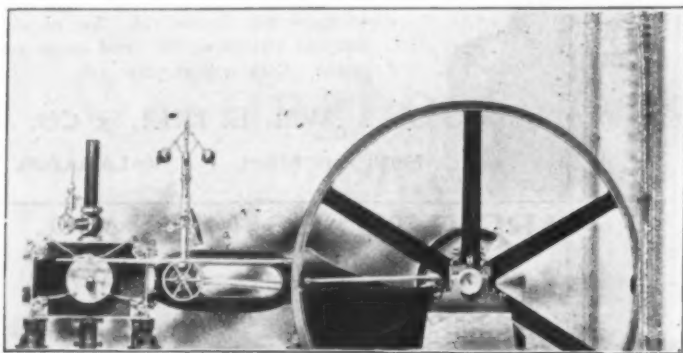


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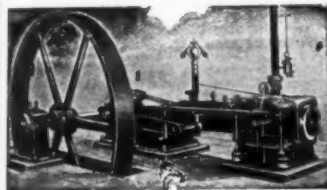


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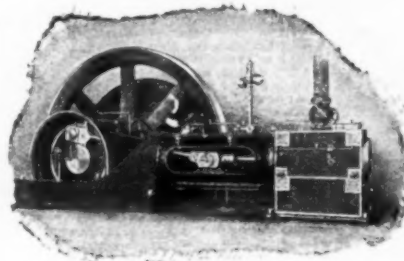
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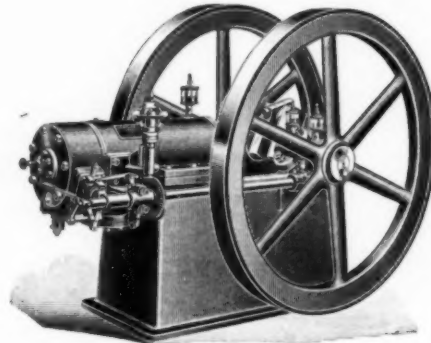


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INDEX See Page 32

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Threshers.

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Cardwell Machine Co., Richmond, Va.

Gibbes, W. H. & Co., Columbia, S. C.

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American Tinplate Co., New York, N. Y.

Tinplate.

American Tinplate Co., New York, N. Y.

Merchant & Co., Inc., Philadelphia, Pa.

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Latrobe Steel Co., Philadelphia, Pa.

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Cardwell Machine Co., Richmond, Va.

Tools. (Machine.) [See Machine Tools.]

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Rand Drill Co., New York, N. Y.

Tools. (Tappers.)

Niagara Machine & Tool Works, Buffalo, N. Y.

Tools. (For Rwy. Rep. Shops.) [See Port. Tools.]

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Gem Mfg. Co., Pittsburgh, Pa.

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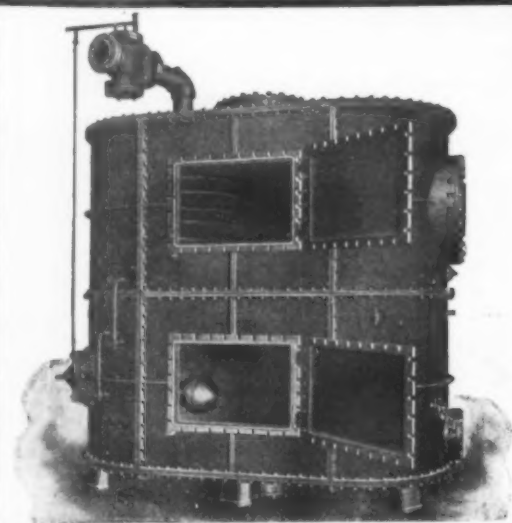
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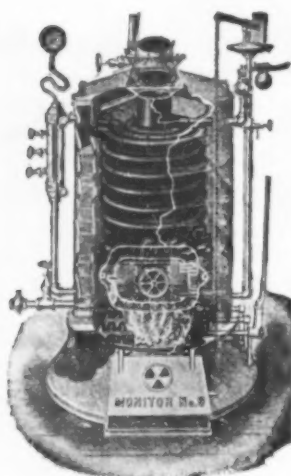
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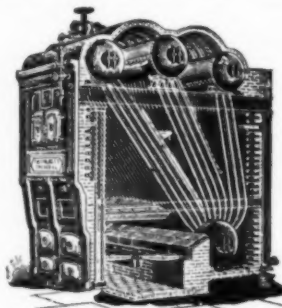
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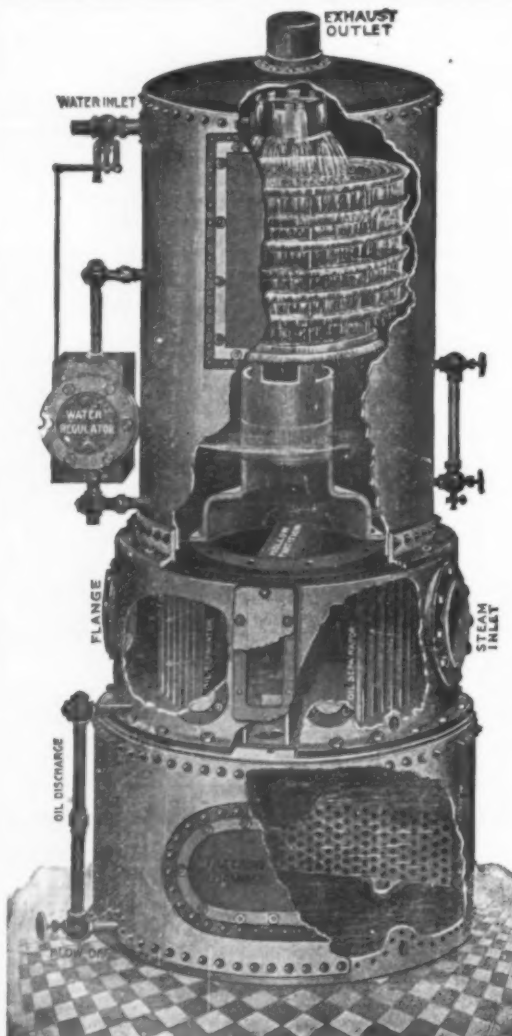


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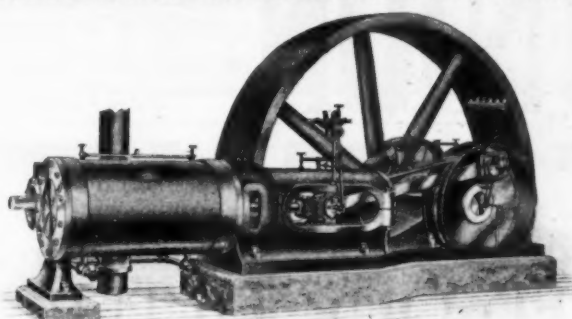
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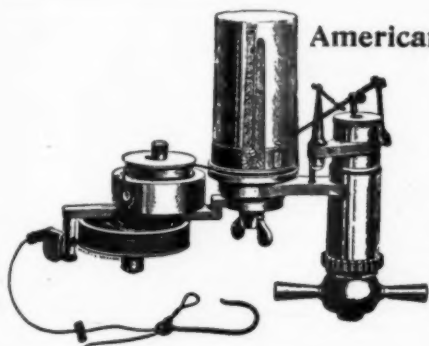
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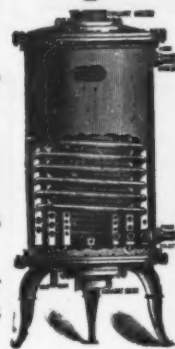
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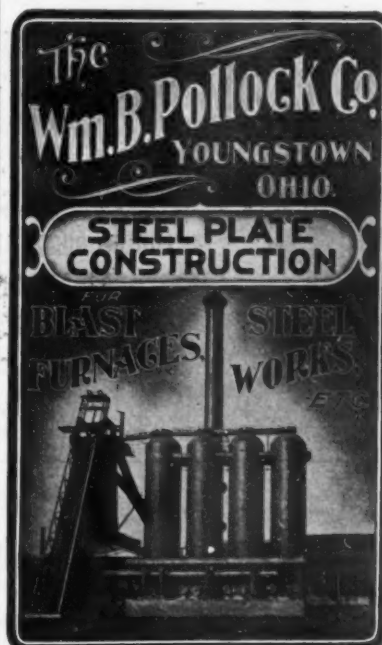
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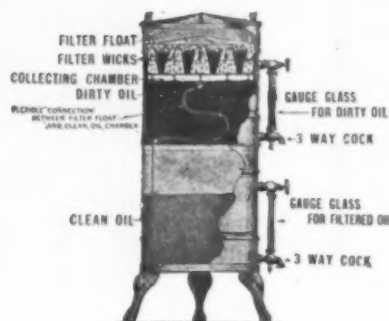
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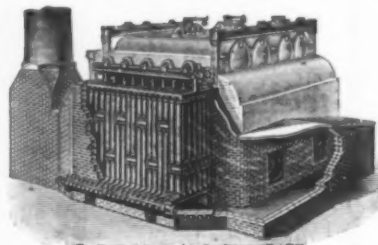
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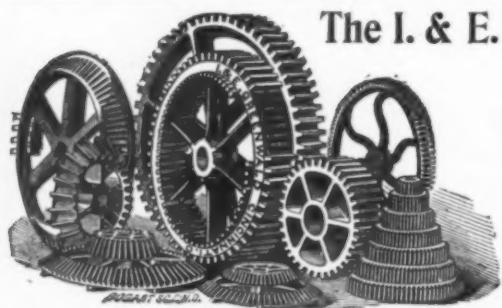
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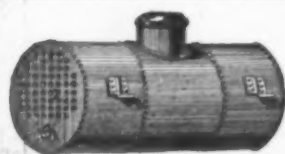
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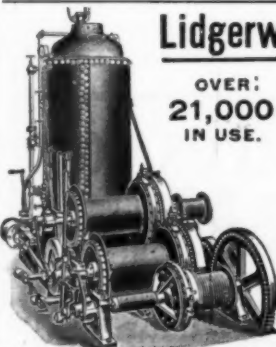
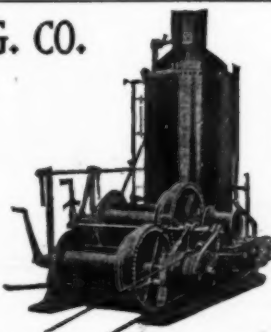
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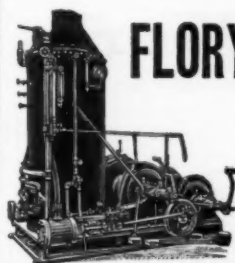
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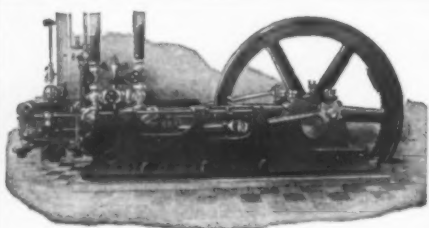
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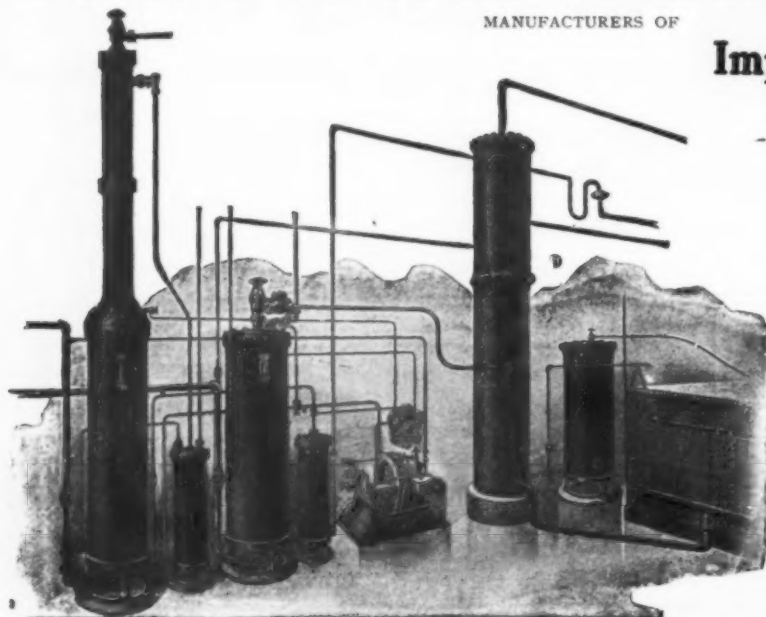
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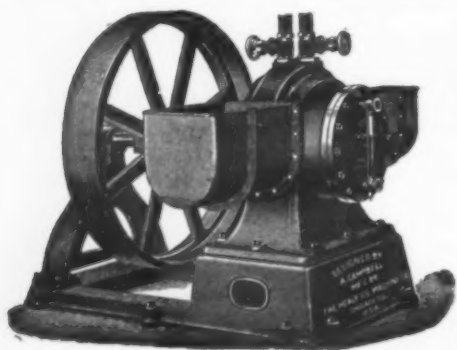
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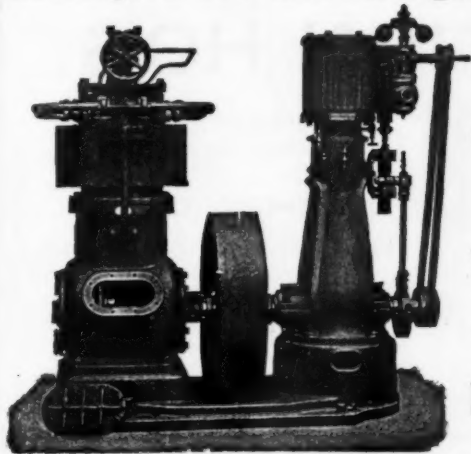
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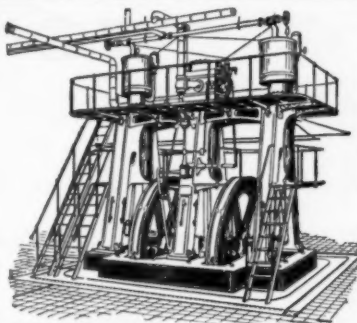
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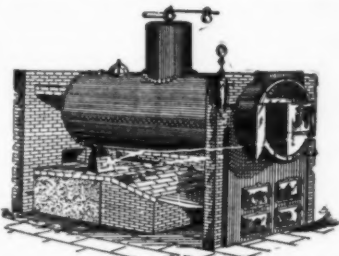
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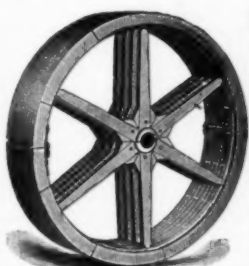
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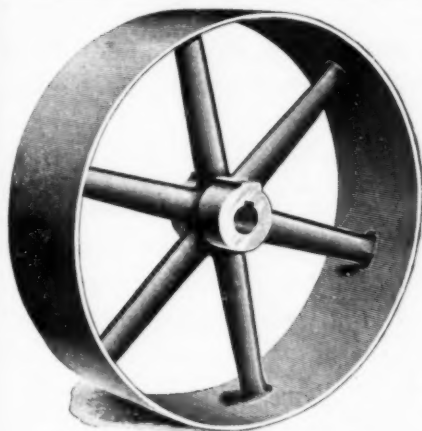
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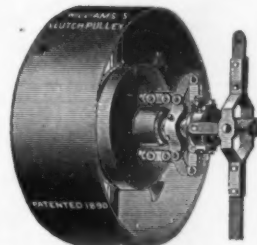
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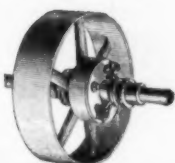
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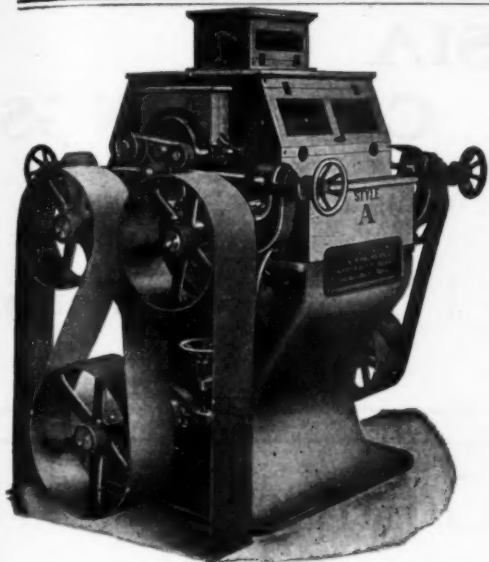
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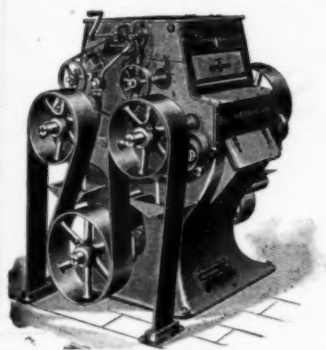
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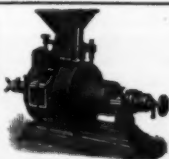
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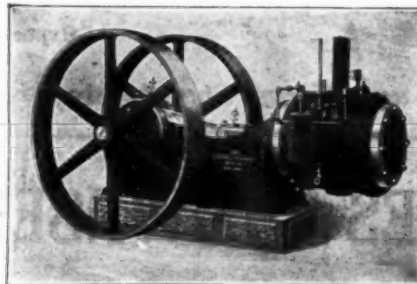
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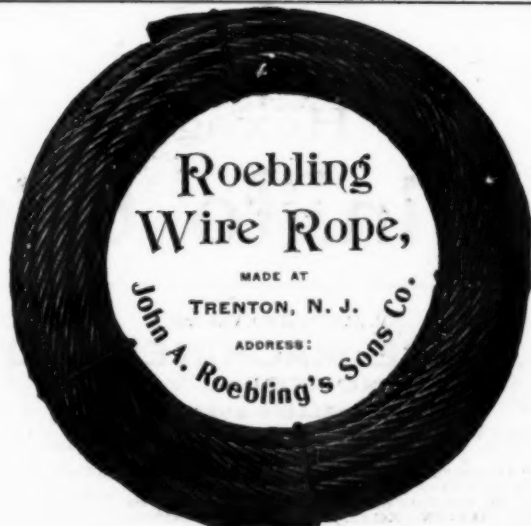
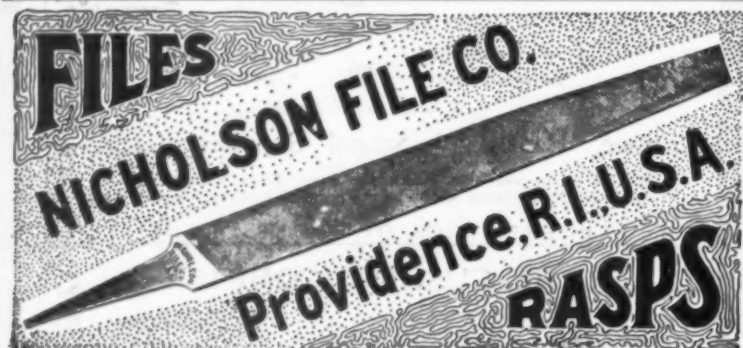
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MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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BALTIMORE, DECEMBER 10, 1903.

COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

THE DAILY BULLETIN of the Manufacturers' Record is published every business day in the year for the purpose of aiding manufacturers and business men generally who need to keep in daily touch with the new industrial, railroad and financial developments of the South and South-west. Supplementing and in connection with the work of the Manufacturers' Record, it is an invaluable aid to all who are seeking business in the South and Southwest, the most wonderfully endowed section of America, where industrial, railroad and financial activity is creating an ever-widening market for machinery of all kinds, railroad equipment and building supplies, and for financial operations, etc., and where the knowledge and skill of the engineer and expert will find their largest field of operation.

The Daily Bulletin is intended simply to cover every day the work of the "Construction Department" of the Manufacturers' Record in reporting every new mining, manufacturing, railroad and financial enterprise organized in the South and Southwest, and it is not intended to be a general daily newspaper. To all who want to be advised every day of every new enterprise organized in that section it is invaluable.

NO ISTHMIAN CANAL OR NATIONAL DISHONOR.

Deliberate lying by indirection and by suppression has, perforce, given way to a sickening mixture of bald sophistry and treachery in the defence of the administration's coup d'état in Panama. The change has dispelled much of the fog of the canal situation. The American people can now understand the isthmian issue in all its naked horridness. The head of the administration has emphasized that in these words of his message, the most momentous for the United States in forty years:

The question now, therefore, is not by which route the isthmian canal shall be built, for that question has been definitely and irrevocably decided. The question is simply whether or not we shall have an isthmian canal.

Does that mean assurance that the Senate of the United States will give effect to a cowardly crime against a weakling nation, attempted in defiance of congressional action, of treaty obligations and of common decency, with a haste designed to tie the hands of constitutional opposition? Or, that failing, does it mean that, as may easily be done under the system dominating present conduct in international affairs, this country shall be involved in war with an inferior people for the purpose of prohibiting criticism of any outrage or silencing opposition to the administration's program? Or, is it proposed to introduce the Latin-American coup d'état as the feature of government at home? In either event, it is time for Congress to vindicate the Constitution and the laws and to stand between the people, whose agent it is, and a menacing peril far-reaching in its possibilities. It is for Congress to inform the administration that it is mistaken in its belief that the route of the canal has been irrevocably decided.

The act of June 28, 1902, must be repealed and nothing further done in that direction until it is definitely known that such tremendous responsibilities are in safe hands; until there is an administration sure to be guided by the Constitution and swayed by patriotic integrity and truth.

Repeal of the act would probably mean postponement of canal construction indefinitely. Better that than the ills which must inevitably flow from the success of the scheme fledged on November 3 last.

In this emergency, involving the fundamentals of American institutions and of international and national righteousness, Congress must act promptly and unequivocally in behalf of the people of the whole country, irrespective of party and without regard to the slightest material consideration. The conspirators must be sharply reminded that American traits have not been dwarfed by temporalities, and that at a vital moment like this the dollar can be forgotten in devotion to duty, commerce can become secondary to conscience and political ambition can yield to principle. The schemers must be taught that the might of mob rule in foreign relations shall have its limits, lest it come to dominate in home affairs.

High-handed acts of the administration, justified neither by right nor by expediency, where there was practical safety from detection by the innate honesty of the people and no danger of defeat in exploits abroad, have simplified the question. It is not whether or not we shall have an isthmian canal. It is, an isthmian canal or national honor?

It cannot be doubted what the answer of patriotism, integrity, truth and justice should be.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 56 and 57.

THE COTTON CROP AND ITS PRESSING PROBLEMS.

Is there any serious danger of a permanent decrease in the cotton crop of the South, or, rather, is there any danger of the South failing to increase its cotton production rapidly enough to meet the increasing demands of the world? It is claimed that there is such a danger, and that the present conditions are not temporary, but that they are indicative of the South's inability, without some radical change, to materially increase its cotton crop. It is claimed:

1. That there is a gradual deterioration of the seed, due to the selling of the best seed to the cotton-oil mills.
2. That the tenantry system has lessened the fertility of the soil.
3. That there can be no large increase without a material gain in population, as the industrial development of the South has drawn many hands from the cotton fields to railroad, mining and kindred work.

These points and many others have their advocates. The danger from the boll-weevil is freely admitted, but as that, in its present shape, is a new problem, its influence cannot yet be measured, and it may at this time be omitted from the discussion, although it may prove to be the greatest factor in the cotton question.

In order to get at some of the facts it may be well to present the statistics of cotton production, acreage, etc., for a long period. Commencing with the crop of 1871-72, we have:

Years.	Acreage planted.	Crop, Pounds net.	Net pounds per acre.	Bales in crop, 2,571,000.	Net weight per bale, 443.	Bale in crop, per bale, 0.235.
1871-72.....	8,911,000	1,317,000,000	148	3,931,000	444	0.41
1872-73.....	9,560,000	1,746,000,000	182½	4,170,000	444	0.38½
1873-74.....	10,816,000	1,850,000,000	171	4,832,000	440	0.39½
1874-75.....	10,382,000	1,686,000,000	162½	4,474,000	440	0.39
1875-76.....	11,635,000	2,059,000,000	177	4,773,865	450	0.40½
1876-77.....	11,500,000	1,972,000,000	171½	5,071,155	447	0.41½
1877-78.....	11,825,000	2,148,000,000	181½	5,701,252	454	0.45½
1878-79.....	12,240,000	2,208,000,000	180¼	6,005,750	460	0.41
1879-80.....	12,680,000	2,615,600,000	206¼	5,456,018	450	0.32
1880-81.....	16,123,000	3,038,615,000	188½	6,946,750	470	0.42
1881-82.....	16,851,000	2,455,221,000	145	5,713,200	462	0.34
1882-83.....	16,276,000	3,266,075,290	200	5,706,165	460	0.33
1883-84.....	16,740,000	2,639,408,400	157	6,575,691	463	0.36
1884-85.....	17,426,000	2,624,895,900	150	6,505,087	464	0.35
1885-86.....	18,379,114	3,044,544,333	165	7,046,833	467	0.37
1886-87.....	18,581,012	3,048,369,368	162	6,638,290	470	0.36
1887-88.....	18,901,895	3,290,871,011	173	7,311,322	471	0.36
1888-89.....	19,322,673	3,260,696,300	168	8,652,597	473	0.41
1889-90.....	20,171,896	3,472,861,786	172	9,035,379	473	0.43
1890-91.....	20,809,053	1,692,678,381	196	6,290,365	475	0.37
1891-92.....	20,714,937	4,273,734,367	206	7,549,817	474	0.38
1892-93.....	18,067,924	3,182,673,375	176	9,901,251	481	0.46
1893-94.....	19,684,000	3,578,613,258	182	8,757,346	477	0.38
1894-95.....	21,454,000	4,792,295,484	223	8,757,364	477	0.39
1895-96.....	18,882,000	3,414,054,042	181	11,199,594	482	0.47
1896-97.....	22,311,000	4,477,548,828	197	11,274,840	489	0.48
1897-98.....	24,071,000	5,398,397,108	224	9,436,116	479	0.44
1898-99.....	23,572,000	5,513,296,760	233	10,883,422	485	0.43
1899-1900.....	22,582,055	4,757,062,942	210	10,680,680	483	0.39
1900-1901.....	23,805,629	5,035,959,670	211	10,727,559	483	0.39
1901-1902.....	27,587,534	5,158,868,880	188			
1902-1903.....	27,114,103	5,097,451,264	188			

Has there been any decline in the yield per acre? This can be judged only by a fair study, not of individual years, but of averages for different periods. Taking three-year periods as a fair basis, as it is not likely that weather conditions, good or bad, would be the same for three years in succession, the average yield per acre has been as follows:

Years.	Average yield per acre, Pounds.
1871-72 to 1873-74.....	167
1874-75 to 1876-77.....	167
1877-78 to 1879-80.....	167
1880-81 to 1882-83.....	177
1883-84 to 1885-86.....	158
1886-87 to 1888-89.....	168
1889-90 to 1891-92.....	151
1892-93 to 1894-95.....	195
1895-96 to 1897-98.....	223
1898-99 to 1900-1901.....	218
1901-1902 to 1902-1903.....	188

These figures, showing the average yield per acre, indicate that for the three-year period ending with the crop of 1873-74 to the similar period ending with 1891-92, covering twenty-one years, there were no material changes in the yield which would indicate any permanent increase or decrease in the productivity of the soil. The average yields for three-year periods during that time fluctuated between 191 pounds per acre and 158 pounds; but beginning with the three-year period from 1892-93 to 1894-95, when the average was 195 pounds per acre, or more than the average for any similar period during the preceding twenty-one years, there was a very marked increase in the yield per acre, reaching 223 pounds in the three-year period 1895-96 to 1897-98, so far above any yield prior to that period, except for a single year since 1871-72, that it stands out alone as a period of phenomenal production per acre. The next three-year period showed a small decrease, but was still much higher than in any preceding three-year period since 1871-72. For the two years ending with 1902-1903 the average was 188 pounds, a further decline, but still above the average for the twenty-one years from 1871-72 to 1891-92. The yield for this year will probably be much smaller than for many years, but the weather conditions were so abnormal that no fair deductions as to the productivity of the soil or seed can be based on this.

If we look back for six years only we see a steady decline in the average yield per acre—a decline that would by itself seem so alarming as to command the most serious attention of the country; but if we go back of that for twenty

years we find that the high averages between 1895-96 and 1900-1901 were abnormal, and, therefore, the decrease in the production per acre may not be as serious as it looks on its face. On the other hand, these high averages for the whole South between 1892 and 1898 may in part be due to the heavy opening up of new and fertile soil in Texas, Indian Territory and Oklahoma, offsetting a decline in the older sections. At any rate, the cotton situation is one which demands the widest investigation by the national government and the experts of every agricultural college in the South. The welfare of the whole country, the vast foreign commerce based on cotton, the enormous cotton-manufacturing interests of America and Europe are at stake. If there is no danger, the world needs to know it beyond the possibility of any error; if there is danger, then no sum, whether it be one million or one hundred million, is too large for the national government to spend in overcoming it.

If our soil is losing its productivity by reason of the faulty tenantry system, a change must be worked out.

If the seed are losing their fertility by reason of the best being sold to the mills, we must meet that issue and rectify it.

If there is a growing scarcity of farm hands by reason of the development of industrial interests, thus making it impossible with our present supply of labor to increase our cotton crop, it becomes of international importance to turn the tide of white immigration from Europe to the South, that the Italians, Portuguese and others may make up the supply of farm labor to do this work.

The South must get ready to raise an average of 14,000,000 to 15,000,000 bales of cotton a year within the next five or ten years, since the growing consumptive requirements of the world absolutely demand an increase in cotton production as large as that.

It may be interesting in this connection to present a table showing the total production of cotton, the amount exported and its value, and the total value of the crops by years for the period under discussion, from 1871-72 to 1902-1903:

Years.	Exports. Bales.	Value of exports.	Total crop. Bales.	Value of total crop.
1876-77	3,030,835	\$171,118,508	4,474,069	\$252,602,340
1877-78	3,390,254	180,031,484	4,773,865	255,768,168
1878-79	3,481,004	162,304,250	5,074,155	236,556,031
1879-80	3,885,005	211,535,305	5,781,252	313,696,452
1880-81	4,589,246	247,035,746	6,806,750	356,524,911
1881-82	3,582,622	199,812,644	5,456,048	304,298,744
1882-83	4,766,597	224,921,413	6,949,756	327,328,137
1883-84	3,873,139	195,854,531	5,713,200	288,916,524
1884-85	3,950,923	200,276,823	5,706,165	289,245,503
1885-86	4,270,334	203,909,617	6,575,691	313,989,245
1886-87	4,477,582	204,423,785	6,505,087	296,957,221
1887-88	4,676,124	221,343,932	7,046,833	333,526,005
1888-89	4,854,573	236,383,775	6,938,290	337,825,340
1889-90	4,906,513	248,688,075	7,311,322	363,884,436
1890-91	5,783,101	287,649,930	8,632,597	430,380,174
1891-92	5,898,545	256,869,777	9,055,373	335,475,538
1892-93	1,410,521	187,012,689	6,790,285	284,055,476
1893-94	5,309,318	207,964,381	7,549,817	292,332,599
1894-95	6,926,025	302,118,351	9,901,251	288,918,504
1895-96	4,751,284	193,987,846	7,157,346	292,234,437
1896-97	6,088,321	227,728,459	8,757,964	327,547,854
1897-98	7,674,065	232,316,326	11,199,394	338,432,468
1898-99	7,452,116	212,155,962	11,274,810	282,772,967
1899-1900	6,656,871	215,652,298	9,136,416	363,773,836
1900-1901	6,679,931	317,816,429	10,283,422	494,567,549
1901-1902	6,715,793	284,279,190	10,690,680	452,113,184
1902-1903	6,796,378	310,635,370	10,727,559	492,481,778

These figures indicate that after 1890-91 there was a very rapid decline in the value of the cotton crop, notwithstanding the enormous increase in production, and the largest crop ever raised—that of 1898-99 of 11,274,000 bales—yielded to the farmers only \$282,000,000, against \$430,000,000 for the crop of 8,650,000 bales of 1890-91. The low prices prevailing from 1891-92 to 1898-99 were abnormal and should not be taken as a criterion on which to base any estimates as to the price of cotton in the future. As a whole, the prices during that period were unprofitable to the farmers and had a most injurious effect upon the prosperity of the South. In fact, during that period the farm interests of the South passed through a season of depression such as the Western farmers had many years ago when corn and wheat were so low that it was more profitable to burn corn for fuel than to ship it to the East. Commencing with 1899-1900 there was an increase in the price of cotton, but it was not until 1902-1903 that prices got back to the average figures which had prevailed for 100 years prior to 1891, with the exception of a brief period from 1840-41 to 1844-45. Prior to 1840-41 the average price of cotton for the year in New York had never gotten below 13 cents a pound. In 1840-41 it dropped to 9.50 cents as the New York average for twelve months, and then steadily declined until 1843-44, when the New York average for the year was 5.63 cents, the lowest average ever recorded. From this it quickly rallied, reaching 7.87 cents the following year and 11.21 cents in 1846-47, declining again in the two following years, but by 1849-50 it recovered to 12.34 cents. Between 1850 and 1860 the average New York price ranged from 9.50 cents per pound in 1851-52, the lowest during that period, to 13.51 cents in 1856-57. During the war cotton advanced in New York to over \$1 per pound, and for some years thereafter it fluctuated between 44 cents and 13 cents as the average New York price. The largest crop produced before the war was 4,890,000 bales in 1859, which was marketed at an average of 11 cents as the New York price for the year. Between 1852 and 1890, or nearly forty years, there was only one year in which the New York price fell below 10 cents, and that was in 1885, when the average was 9.44 cents. The rebound from the low price of 1898-99 caused by the short crop of the following year has been continued, and during the last few years the price of cotton has been on a more normal basis than existed from 1890-91 to 1898-99. The vast importance of this to the South is shown in the fact that the aggregate value to the farmers of the South of the cotton crop, including seed, for the last five years, including the present crop, has been \$2,575,000,000, against \$1,775,000,000 for the five preceding years, showing a total gain in the last five years of \$800,000,000 over the amount received by the South for its cotton crop in the preceding five-year period. These stupendous figures indicate something of what the higher price of cotton means to the welfare of the entire South. The value of the cotton crop of 1902-03, including seed, was \$565,000,000. The value of the present crop, including seed, may be safely estimated at \$625,000,000; but added to the very great increase in the value of the South's cotton crop is the fact that it raised probably the largest corn crop which it ever produced, the value of which is

many millions of dollars greater than the corn crop of last year. Not only does this big corn yield add to the present prosperity of the Southern farmers, but it insures the production of next year's cotton crop at a very low cost, as the South will be less dependent upon the West for the foodstuffs with which to make its cotton crop than for many years. The \$800,000,000 received by the South for its cotton during the last five years in excess of what it received during the preceding five years is nearly twice as much as the entire capital invested in all the cotton mills of the United States in 1900; it is more than the present market value of the entire property of the United States Steel Corporation, more than the market value of the Standard Oil Co., more than the entire capital of all the national banks of the United States. For the first two or three years of this five-year period the Southern farmers used their increased earnings to pay up debts; then they began to accumulate a little, and this year they will be in shape to spend more freely than for many years.

OFFICIAL AND INDIVIDUAL STATISTICS.

The Manufacturers' Record had recently occasion to comment in a friendly way upon skepticism expressed by Mr. S. N. D. North, director of the census, about the wonderful increase in the number of cotton spindles in the South. Mr. North suggested that the Manufacturers' Record had used inflated figures, and we were at some pains to demonstrate to him by citation from at least two other independent statistical authorities, and by actual consumption of cotton in Southern mills, that he had not kept in close touch with Southern textile development. Commenting upon this explanation the Houston (Texas) Post says:

We prefer to believe that the statement of the Manufacturers' Record as to the number of spindles in the South is accurate, even though Mr. North does see fit to doubt it. We have had absolute proof, in the shape of the report made by the committee which investigated the census-office methods some months ago, that there are many loopholes where errors may creep in, and although the machinery at the command of the Manufacturers' Record is, perhaps, not as complete nor as extensive as that controlled by Mr. North, we are willing to believe that there really are 8,000,000 spindles in the South, even though Mr. Merriam's successor is skeptical. * * * There can be no question of the marvelous development which has taken place in the South within the past two or three years, and when we consider, in connection with this, the enormous chance of error on the part of the census office, we feel all the more certain that our Baltimore contemporary is right and Director North is wrong.

It may be suggested that the figures of the Manufacturers' Record relating to cotton mills are based upon tabulations made from month to month under a system justified by many years' experience, and not unlike that which the census office is introducing for the collection of cotton-ginning statistics. It is hardly to be expected that the census, heretofore occupied only in 10-year compilations, could at once, upon being placed upon a permanent basis, elaborate the machinery for the prompt and accurate presentation of facts equalling that which other agencies have been using for years. All that may come in time, it is hoped, and it is also hoped that meanwhile the census bureau may not develop the use of figures for the purpose of proving things, which has characterized the "statistics" of more than one of the government statistical agencies. Figures presented under government auspices are worse than worthless if they are not collected and collated upon a scientific basis, regardless of consequences, and if they are so arranged as to give a desired color to any particular enterprise.

TYPE OF A MAN FOR THE PRESIDENCY.

Governor Peabody of Colorado has placed under martial law Teller county, in that State, because of the rebellion there of organized labor against the State. The women's auxiliary of the labor unions in Cripple Creek have, quite naturally from their point of view,

telegraphed to President Roosevelt protesting against this effort of Governor Peabody to safeguard American institutions. President Mitchell of the United Mine Workers of America has promptly left the field where the militia has been ordered to back up Governor Peabody's determination. The anarchy prevailing for some time past in those Western mining regions has been equaled in American history only by the conditions which prevailed in the Pennsylvania anthracite regions a year ago under the auspices of the United Mine Workers of America. Midnight assassination, brutal assaults, the destruction of property by dynamite and the boycott have had full play, and the organization of criminals has thrived under the truculency or complacency of politicians, irrespective of party. To the disgust of his own party, James Peabody, a country banker, and of little prominence, stumbled into the governorship at a time when more ambitious and better known members of the republican party looked upon their party's chances as forlorn. Since his inauguration he has made a quiet, though none the less effective, contest against open and cowardly lawlessness, undaunted by the hobnobbing of Mr. Roosevelt with leaders of law-defying organizations, and now, unexpected any federal assistance, he has undertaken with State forces to settle the problem once and for all. Friends of good government everywhere and regardless of party, men who believe in constitutional government as opposed to whimsical dictatorship acting above the law or making law secondary to personal aim without actually violating the law, will follow with deep interest the developments in Colorado, and, whether or not he succeeds in his laudable purpose, will see in Governor Peabody the type of a man to be nominated for the Presidency by the republican party, if it expects to be supported by men who are for the maintenance of law and order above all else.

ANOTHER NATIONAL HOLIDAY—NO.

Typically illustrative of the old adage that the devil finds some mischief still for idle hands to do was the introduction during one of the five-minute sessions of the special meeting of Congress last week of a resolution providing for the setting apart of April 14 as a national holiday, to be named "Martyrs' Day," in commemoration of the deaths of Lincoln, Garfield and McKinley. The father of the resolution is Congressman Frank C. Wachter of Maryland. Nothing came of the resolution, for, like so many other propositions of its kind, it lapsed with the merging of the extra session into the regular session. To discourage Congressman Wachter from reintroducing his resolution into the session which it is hoped will find time to attend to the material interests of the country, he should hear a few unmistakable expressions of opinion from the common sense and the business intelligence of the country.

The common sense would inform him

that "martyr" in the bunching method of his resolution is a misnomer, and that the setting apart of a day to celebrate the assassination of Presidents of the United States by crazy men would be likely to have a dangerously suggestive effect upon other crazy men.

Business intelligence would tell him that there are already too many national holidays. No reasonable person can begrudge another the recreation which he has earned and needs, and which is a matter of voluntary choice on his part. But a national holiday means enforced idleness for thousands of persons who would prefer to work, and, in the case of such agencies of progress as the national banks, the loss of a great deal of valuable time and a vast amount of unnecessary pressure.

It is demoralizing enough to increase the number of national holidays for causes appealing to the great majority of the people of the United States, without searching round for the cause of another holiday appealing only to guff.

A MISTAKE ABOUT AN EDUCATIONAL CONFERENCE.

When the Conference for Education in the South assembled last April at Richmond, Va., it had an invitation for its 1904 meeting from at least one Southern city, the postoffice address of one of its most interesting and interested promoters. It seems that since then competition, not at all surprising to persons who are acquainted with the P. T. Barnum methods of the undertaking, has developed, and now it is announced that Birmingham, Ala., has been practically settled upon as the place of meeting in April next. The Age-Herald, in making the announcement, reveals a state of misconception of the character and purpose of the gathering that has been shared even by some of its attendants ever since it was adroitly planned five years ago at Capon Springs, Va., and which, therefore, calls for a few words of enlightenment. Somebody has persuaded the Age-Herald that the Conference for Education in the South is "perhaps the largest, and certainly the most influential, organization that is likely to meet" in Birmingham; that it "includes many of the most distinguished philanthropists and friends of education in the country," and that "it is estimated that fully one thousand representative people will be present at the Birmingham session."

Judging by the Richmond meeting of the Conference, it may be safely predicted that the majority of the "one thousand representative people" will be representative principally of the hospitality of the community where the gathering is held—a hospitality so frank and generous that it is unable to realize that it could possibly be used to give some of its objects a standing otherwise not enjoyed by them.

"Most distinguished philanthropists" is a phrase of exaggeration and definition. The "philanthropists" connected with the Conference who have spent their own money for "education" in the South have been principally interested in the negro, and the most notable result of their five years' campaign has been the \$6000,000 endowment of Booker Washington by Andrew Carnegie. Some of these "privately defray" the cost of supporting the "philanthropy" of the Southern Education Board. This is described by its president, who is also the president of the Conference, as "a dependent without a dollar of margin over its executive expense roll." It was created as the executive organization of the Conference for Education in the

South, which has tried to disavow its parental responsibilities, no doubt, because the Conference would lose ground should it openly countenance such compilations of the Board as that which the national Bureau of Education has recently printed as being useful "particularly in discussions relating to the right of suffrage." Some of these "philanthropists," as dominant members of the General Education Board, encourage other dependents in spending annually \$100,000 of John D. Rockefeller's "educational missionary" fund, that being about as far as the General Education Board has yet advanced in its ambitious purpose to be the great clearing-house of educational philanthropy in the country on its platform of "education without distinction of race."

This brings one to the question of the influence of the Conference. The majority of its officers are now Southern men. A great deal of capital was attempted to be made of that fact at Richmond to meet the just criticism of the purpose of the movement which does not bar individuals on the expensive executive roll of the Southern Education Board from officeholding in the Conference. But it signifies nothing beyond the honesty of purpose of some Southern men who have become identified with the Conference. They are probably unaware that whatever influence the Conference may exert will be in furtherance of its underlying purpose, the virtual revival of the propaganda for federal aid and the inevitable federal direction of negro education, and ultimately white education. That propaganda met its proper fate at the hands of the intelligence and self-respect of the country fifteen years ago. It was supported then by not a few sincere, though mistaken, Southern men under the tutelage of educational dependents posing as experts. It had then, in the poverty of the South, a superficial pretext, and in the despair of many of the people the opportunity for an undermining of the fundamentals of independence. Fortunately for the country, the pernicious scheme failed, and there is now less excuse than there was in the eighties for attempting to revive it. Of course, it is supported by theorists, who look to "education" as the most potent means of equalizing whites and negroes; by "educators," who have in it the prospect of higher wages; by "educational missionaries," who make an easy living in the hire of philanthropy by indulging in a lot of "educational" patter, and by poseurs in philanthropy who see in the expenditure of untold millions of taxpayers' money through the federal treasury their only escape from an ever-increasing horde of dependents.

It is regrettable that any organization which is used as the principal medium for the promotion of such an undertaking should have the name of Southern. It is absolutely un-American. Its proceedings are tame and innocent enough. The harm in them consists in the fact that they give the promoters, participant or in the background, an importance among the uninformed unjustified by the circumstances.

INTERNATIONAL MERCANTILE MARINE.

The affairs of the International Mercantile Marine Co. do not concern simply the stockholders. This is more than an ordinary public corporation, for it represents the interests of the people of the country in an effort to regain our place upon the sea by giving life to our long-dormant mercantile marine. In the organization of this company Mr. Mor-

gan was without doubt inspired by the loftiest motives of patriotism. The Manufacturers' Record recently emphasized this point, and urged that Mr. Morgan should receive the encouragement of the American people rather than their bitter criticism; that the International Company should be regarded as an undertaking of national importance and its success be a matter for national congratulation as the first great move to rebuild our ocean shipping interests. But while these facts are true, it may possibly be that, carried away by the boom spirit of the times, Mr. Morgan may have made great mistakes in the basis of his organization. He may have been misled into paying much higher prices for the properties taken over than their real values justified, and in this way he may have created an overloaded organization which can never, unless reorganized, prove profitable. The success of this company would be a great stimulation to investments in shipping interests; its lack of financial success would for many years to come be a powerful factor against any revival of our mercantile marine. It is of national importance, therefore, that this company should succeed and that its securities should command public confidence. For this reason, if the company is overcapitalized by reason of exorbitant prices paid for any of its properties, American or English, does it not behoove Mr. Morgan to frankly admit the mistake and to seek to overcome the error by some readjustment which will put the company on a basis where its success will revive a general interest in shipping interests? Such a move might prove to be a powerful aid towards a revival of public confidence in all the great undertakings with which Mr. Morgan is identified, for the public sometimes has a right to be taken into the confidence of its great financial and business leaders.

"A POWERFUL MAN PHYSICALLY."

Some one owes an apology to Honorable Hoke Smith, the great educator and philanthropist of Atlanta. In the daily papers in this part of the country of Thanksgiving Day appeared a lurid account of an alleged encounter of Mr. Smith and Dan W. Rountree in the presence of a United States judge. The account dealt with blows, blood and bruises, and credited Mr. Smith, "who is a powerful man physically," with lifting Rountree from his feet and hurling him against a radiator ten feet away. The account told of rights and lefts being dealt with the regularity of clockwork, of clinching, of gore scattered around the courtroom, and of battered faces. At the earliest possible moment the two newspapers of Atlanta were scanned for reliable information about the alleged affair. For it is known that Mr. Smith is peculiarly assiduous in having corrected misleading reports about himself. It will be recalled that not long ago he hastened after two or three weeks to assure the Manufacturers' Record that he couldn't understand how the two Atlanta newspapers could have misunderstood a speech that he had delivered without notes, although he doesn't seem to have made such a protest through the columns of those papers. At any rate, the Atlanta Constitution, in its summary of the day's news, said: "Hon. Hoke Smith and Dan W. Rountree met in encounter in chambers of Judge W. T. Newman of the United States Court." Careful search of the Constitution leads to the belief that the detailed story must have been lost in the shuffle of a couple of items filling six or seven columns with the headlines, "Game Old Fitz Had Gardner at

His Mercy," and "Atlanta Gridirons to Witness Today Two Great Struggles for Supremacy." The Atlanta Journal, in which Mr. Smith is still interested, it is believed, gave some details of the "personal difficulty," which was "witnessed only by the judge and his court stenographer." These details revealed no marks whatever of the encounter on Mr. Smith save regret at its occurrence, and only a piece of court-plaster over Mr. Rountree's lower lip protecting a slight cut "sustained by a fall, his face striking a radiator near the desk of Judge Newman." It seems that as a result of a misunderstanding of Mr. Smith's position the two attorneys, who had been sitting within three feet of each other, arose, and the Journal's account continues: "When Mr. Smith arose it is said that Mr. Rountree faced him in a rather threatening attitude, whereupon the former pushed him back with his open hand. On the slick floor Mr. Rountree lost his footing and fell, his face striking the radiator and cutting his lip. In a moment he was on his feet. Before he had an opportunity of striking Mr. Smith seized him with both arms. Holding him thus, he is said to have told him that he was entirely mistaken about the matter. Judge Newman here interfered and ordered the attorneys to observe order in his presence. Both men obeyed promptly, apologizing for their conduct. They then apologized to one another and came to an understanding. They left the building the best of friends."

Is it not a shame that such a Gaston and Alphonse episode should have been given the lurid color of the dispatch from Atlanta? Can it be possible that the story sent from Atlanta was tangled up on the wires with the dispatch coming to Atlanta telling of the "straight rights and lefts" of "game old Fitz" that "finally put Gardner out of business?" There were clinching and blows and blood and bruises in the Fitzsimmons-Gardner story, but there does not seem to have been any radiator? Hasn't the Hon. Hoke Smith cause to complain that what was merely the joint effect of his physic force and a slick floor was represented as lifting a man from his feet and hurling him against a radiator ten feet away? But we have failed to note any correction telegraphed from Atlanta, though two weeks have passed since the "personal difficulty." Perhaps Mr. Smith will explain the whole thing when he addresses his fellow-educationalists at Atlanta during the Christmas holidays.

ENDING A REPRESENTATIVE CAREER.

Speaker Cannon gave a shock the other day to the individuals who, under national auspices, have grown accustomed to expect the utmost deference at the mere mention that they represent "labor." There are a number of them who are thus employed at Washington, excluding those who are the guests of the President. One of them, H. J. Schultheis, has, according to a dispatch from Washington, been seeking to aid Speaker Cannon in making up the committees of the House of Representatives. Mr. Schultheis is not a member of Congress, but he has been insisting that two members who represent "labor," one of whom has a contested election on his hands, should be placed on the labor committee. Pressing his insistence, he indulged in a loud voice and large words in the Speaker's room, and when Mr. Cannon suggested to him that he would receive no more consideration than any other citizen Mr. Schultheis intimated that he had been responsible as an agent of labor in the defeat of Mr. Cannon for Congress in 1890. Men who remember the defeat of Mr. Cannon for re-election in 1890 know that it was not on account of labor. Be that as it

may, Mr. Cannon set the example for men of greater magnitude and of less magnitude in statesmanship by calling a messenger and saying: "Put that man out of the door, and see that he comes into this room no more." Walking delegates, business agents and other "representatives of labor" have fallen upon hard lines in some respects.

SHIPBUILDING AT JACKSONVILLE.

The owners of a shipbuilding plant which is being established at Jacksonville, Fla., expect that it will attract a great number of Northern ship carpenters looking for winter work in the mild climate. The owners have organized the Southern Shipbuilding Co. and have secured contracts to build three large ocean-going barges 138x35x19 feet, the material being yellow pine. The keels of the first two vessels are being laid, and the third will be laid as soon as the yard is well organized. The loft, 40x150 feet, is already completed, and the yard will be equipped with pneumatic tubes, beveling band saws and other modern machinery to make it as complete as any woodworking yard on the Atlantic coast. Messrs. H. W. Cooke of Philadelphia, A. G. Cummer and William E. Cummer of Jacksonville, who form the company, have secured John Ryan, formerly with the Cramp Shipbuilding Co. of Philadelphia, to take charge of the plant.

FOR POWER AT CHATTANOOGA.

A bill has been introduced into Congress to authorize the city of Chattanooga or a private corporation to develop, as a part of the improvement of the river, the "sneek" in the Tennessee for the purpose of generating electricity for light and power at Chattanooga, with the possibility of extending the power to the operation of railroad lines between Chattanooga, Nashville, Birmingham, Atlanta and Knoxville. It is stated that local men are interested in the organization of the company to take over this work, which will involve the construction of a dam at a cost of \$850,000. This company merely wishes to use the overflow water, and proposes to supplement this, in the event of low water, with coal drawn from an almost unlimited deposit in Walden's Ridge, at the "sneek."

INVESTMENTS IN MISSISSIPPI.

Figures compiled by Secretary of State Power of Mississippi show that during the four years, 1896, 1897, 1898 and 1899, the charters were granted to enterprises with a capital stock of \$25,644,000, in 1900 and 1901 to enterprises with a capital stock of \$26,430,500, and in 1902 and 1903 to enterprises with capital stock of \$47,096,700. Of the 300 charters granted during the past two years, 140 were mercantile, with \$4,026,500 capital; 70 lumbering, with \$3,065,000 capital; 38 oil mills, with \$2,935,000 capital; 57 banks, with \$2,167,500 capital; 16 electric companies, with \$1,490,000 capital; 44 miscellaneous industries, with \$1,345,000 capital; 7 cotton factories, with \$830,000 capital; 2 wagon factories, with \$70,000 capital; 8 telephone companies, with \$58,500 capital, and 8 miscellaneous, with \$31,488,700 capital.

GEORGIA'S 1903 ASSESSMENT.

The total taxable value of all property in the 137 counties of Georgia is \$432,993,873, an increase of \$22,576,633 over last year. Corporations returned \$73,144,481, and franchises are valued at \$13,726,319. City property increased in value in twelve months from \$122,672,195 to \$129,066,548.

The State auditor's office of North Carolina shows that during the past fiscal year the receipts were \$2,293,638.86 and

the disbursements \$2,201,604.31, which, with the balance on hand at the beginning of the year, \$32,463.64, leaves a net balance of more than \$100,000.

A FORESTRY SUGGESTION.

How a Perpetual Timber Traffic May Be Assured.

A correspondent of the Manufacturers' Record, who has given the subject of the preservation of our lumber supplies some study, makes the following practical suggestion:

"I recently had occasion to examine a huge coal and timber property in Tennessee which it was proposed to develop by a branch road. It seemed very plain to me, even though familiar in a most superficial way with forestry methods, that if they were intelligently exercised the territory would perpetually furnish this branch road with a large timber traffic, and that if the road had the power to require that the timber contiguous to the land be so handled, its resources would be continually renewed.

"It is impossible, and hardly advisable, to attempt to graft immediately a complete foreign forestry system on our more crude local conditions, but it would be very easy to inaugurate fundamental methods if lumbermen were made familiar with them, and if it were made to their interest to comply.

"I think this could be easily done by a road giving a freight rebate on timber which has been cut according to simple, prescribed forestry rules. The road need not necessarily lose the amount of such rebate, as the regular schedule may be fixed at a higher figure and the rebate reduce the amount to the present tariff, just as fare paid on the train is at a higher rate than when a ticket is purchased. As a matter of public policy I think the courts would uphold such action on the part of the roads, and, if not, legislation could certainly be got to support it. Such action on the part of the Southern roads would be of immediate and enormous value to the South and to the roads."

Secrecy in Machinery Trade.

F. D. Becker, secretary of the Southern Can Co., Limited, 305 Hennen Building, New Orleans, La., writes to the Manufacturers' Record as follows:

"Four machine manufacturers in Baltimore are not in position to show a man coming over 1000 miles to purchase can-making machinery any of their automatic can-making machinery in running or working order anywhere. And it finally drove me away West, where I could see every manufacturer's automatic plant in running order and make my selection, which I might have done in Baltimore had I been offered the opportunity. This secrecy about this line of business confronting you everywhere you turn is detrimental to the manufacturer of can-making machinery and Baltimore's general commercial interests. It simply drives the buyer away where he is offered the opportunity to see working what he is offered and is desirous of buying."

Wants Agencies.

The Carolina Portland Cement Co., of Charleston, S. C., wants to obtain the agency for some line of commodities that will harmonize with the products it is now selling. This company controls cement, fire-brick and lime plants, and its representatives visit all the large lumber mills, cotton mills, oil mills, iron furnaces, brick works, hardware stores, saw-mills, city engineers, architects and others. Manufacturers who have goods that can be offered throughout the South in connection with the Carolina Company's products are invited to write at once giving particulars.

HOW INTEREST IN THE SOUTH IS INCREASING

The Time Ripe for a Wide Dissemination of Information to Attract Immigration and Industries.

By THOMAS P. GRASTY.

[Written for the Manufacturers' Record.]

The recent extraordinary concentration of public attention on the South, due to a more general realization of the immensity of the South's annual contribution—larger than ever this year—to the national wealth through the exportation of cotton, has created an unprecedented opportunity for the owners of Southern properties of magnitude and importance to add greatly to the permanent value and ultimate earning power of all such properties.

It is a chance to make hay while the sun shines.

There is a tendency, strong as human nature itself, to follow the track of general prosperity. People want to go, and do go, where "business is good," provided they are encouraged to do so by being furnished with information concerning the conditions prevailing in those particular lines of activity in which they are interested and in which they are fitted for work. Now, neither the South nor any other section either wants or needs any class of incomers or homeseekers that is lacking in specific purpose and in ability to accomplish that purpose under favoring conditions. But the South does want and has a place for hundreds of thousands of men who know how to do things and who have sense and energy enough to improve opportunities and to take advantage of the unusually inviting conditions that now abound throughout that section in nearly every line of industry.

Such utterances as the Northern papers are now filled with in discussing the cotton crop, the present and prospective shortage and consequent high prices must necessarily arouse in a general sort of way a widespread interest on the part of earnest people who are anxious to better their conditions and to increase their chances for accumulating a competency. For instance, when a paper like the New York Sun declares editorially, as it did last Friday, that "there is no other part of the country which is so prosperous as the South or in which the business outlook rests upon a more substantial basis," there are thousands of people brought by such a statement into an inquiring frame of mind, each anxious to know where and how to get specific information about various localities, their climatic conditions, healthfulness, the attitude of the natives toward strangers in general and Northern newcomers in particular. Among those thus interested, many are anxious to know where the special kind of work for which they are best fitted and equipped may be most successfully done in this land where "the business outlook rests," as the Sun says, "on a more substantial basis" than anywhere else in the Union.

If such cheerful tidings were being daily given out thus authoritatively concerning any Western section, there would be an instant seizure of the "coigne of vantage" by a scheme of advertising broad enough to answer every inquiry, but the people of the South have not been educated to an adequate knowledge of the value of public advertising—that is to say, advertising for the public good. Even where the leading men quite realize the benefits that may come from the dissemination of such information as the opportunity-seeking portion of the Northern people now wants in regard to the South, there is no organization to provide the means for adequately doing what ought to be done. In this we have an illustration of the old saying, "What is every-

body's business is nobody's business."

A great many thousands of desirable settlers have been brought into the South and a good many millions of money have been invested in Southern industries through the activities of the immigration and industrial departments of the large railway systems, notably that of the Southern Railway. Every dollar spent in advertising by these corporations has proven a highly profitable investment, not merely in the direct results, such as the enlargement of traffic through the increase of factories and thrifty population, but indirectly by reason of the public's appreciation of work of that kind. Indeed, a railroad can have no better asset than the good-will of the people who live in the States it passes through. When that good-will reaches the point of an appreciation on the part of the public bordering on gratitude it annually adds a million or more of dollars to the right side of the balance sheet, largely through fair play on the part of juries and the curtailment of raids by organized mulcting bands in legislatures, city councils and elsewhere.

But valuable as has been the work done during the past few years for the South through agencies maintained by the railroads, conditions have not until now been ripe for results proportionate with the merits of the case. The time to strike is when the iron is hottest. The comment on the South and the South's resources generally, prompted by the cotton situation, has heated the iron. The intelligent financiers who control Southern railroads will quickly see that now is the time to strike and to strike hard. There should be spent now ten times as much as heretofore in advertising the openings ready and waiting for men who know how to work and want to work either on farms or in factories and in pointing out the exceedingly profitable openings for men able to buy farms and build factories, either small or great, in the section that is admittedly the most prosperous for today and most promising for tomorrow.

The need for a more general and systematic plan for enlightening the public mind at the present time is emphasized by the fact that while Southern material prosperity is admitted by certain newspapers on one page, the grossest kind of misrepresentation of the South is indulged in on another page of the same issue. This latter is due in some cases to malevolence pure and simple; in other cases, and let us hope in the majority, it is due to gross ignorance. Within the last month I have read editorials, written by men of education, calculated to make people think that there is at the South a settled and ineradicable contempt for men who work with their hands. There are other presumably intelligent writers who, in the recent discussion of the South's capacity for producing cotton, have declared that that capacity is limited to the amount of work that the negroes can or will do, and that whatever credit the South is entitled to for having saved the country from a panic by reason of its cotton exports this fall should be given to the negroes alone. Now, one of the effects of this is to make Northern and New England farmers who may be contemplating a change of location think and believe that no farm work at the South is done by white men. How unfounded is such a conclusion may be shown by an examination of the last census and several preceding ones, which will show that the cotton grown by white

labor in the South is becoming a greater and greater proportion of the total.

White labor is also producing a greater and greater proportion of corn and livestock, since those white farmers who work with their own hands are the ones who more than others diversify their crops, raising their own bread and meat. On the other hand, it has been found simply impossible under the tenant system to induce the negro to plant anything else but cotton. So obstinate is the negro in this respect that it is the exception rather than the rule for him to cultivate a garden, preferring to buy from the "advancing" merchant everything he eats. Moreover, there are large and prosperous districts in every Southern State where one may ride across country all day long (as I have done) and see only white men at work in the corn and cotton fields.

Another much-paraded bugbear is the (alleged) state of discord between the whites and blacks. The facts are that in 999 out of every 1000 communities in the South there is today a distinctly friendly feeling on the part of respectable white men toward all negroes who are honest and industrious. Whatever bad blood exists is such as would arise under similar conditions in any neighborhood in New York State, New England or the Northwest. And I venture to say that there is at the South quite as much toleration of idleness, indolence and petty thieving on the part of the good-for-nothing negro element as there is in the Northern regions named for the same offenses on the part of the same element among the whites. Nine-tenths of what is paraded as race-hatred and "race-oppression" is due to individual sins and shortcomings that would be quite as sternly condemned in any other section.

The point I am trying to make is that Northern men who work with their hands, either as artisans, day laborers or as farmers, will find plenty of white company all over the South. The prevalent impression on this score is only one of a hundred misconceptions as to Southern conditions that must be systematically removed before the South can hope to attract any large percentage of the hundreds of thousands of men of various degree and capacity who might with profit to themselves and with profit to the national wealth, and profit to railroads and other great interests, as well as with profit to Southern people, change their abiding places and fields of endeavor.

In the prosperity now upon the South and ahead of us no class can be made to share more abundantly than the colored population. As a member of the class which has ever stood ready to promote the negro's best interests and to increase his fitness for the responsibilities of the kind of citizenship contemplated by Abraham Lincoln—the taxpaying class of the South—I desire to say that one of the most gratifying results of higher prices for the South's chief staple will be to give encouragement to the honest and industrious negro to stick to the kind of work for which he is best fitted and in which he has the best opportunity to so bring up his children that the rising generation shall be an improvement on the generation that is soon to pass away. It is on the farm, not in the town, where improvement of that sort is possible.

Prosperity sweeps away many of the mental fogs which settle upon an individual or a community during times of financial distress. The extreme depression in cotton for a number of years created much unrest throughout the agricultural interests of the South and resulted in populist agitation against capital and corporations. With the coming of abundant prosperity through the higher price

of cotton the mists will clear away and the South will return to its normal condition of conservatism against the tide of social-

ism and anarchy which prevails in so many places.

New York, December 8.

TYPES OF WEST VIRGINIA DEVELOPERS

By ARTHUR S. MORTON.

[Written for the Manufacturers' Record.]

At the head of Tygart's valley, and located upon the banks of the stream of that name, is the enterprising little city of Elkins, in West Virginia. For its size, there is probably no more progressive community within the State limits.

Looking down upon it are the eyes of the supervising architects who designed the plans for its existence and who builded its fortunes—the master hands which aided, if they did not direct, every enterprise that made for the public weal. Few towns have had such advantages, few have so profited thereby. Ex-Senator Henry G. Davis and his son-in-law, Senator Stephen P. Elkins, are the founders and builders of the city of Elkins, which in part recognition bears the name of the junior senator, the neighboring town of Davis being likewise named after the senior senator. These men are to West Virginia what Henry M. Flagler is to Florida. Few States can claim such public-spirited citizens, such intrepid promoters of vast enterprises. The Davis-Elkins interests have been and are everywhere apparent throughout a large section of the State, principally within a wide belt of country extending through the center of the State from northeast to Southwest. At will they have builded railway lines, established towns, organized banking institutions, financed mammoth coal operations, endowed public charities and in many ways done for their State, unaided, what no corporation or other group of men within her borders would or could have done. With this record the people of the State, and especially the people of Elkins, look to them for a continuance of this vast and munificent program.

In a literal sense may it be said that the people of Elkins look up to their great citizen financiers, for high on the brow of a crescent-shaped hill are the castlelike homes of these gentlemen, whose towers and turrets rise against the sky line a picturesque reminder of the medieval. From this eminence is spread out a vast domain of parklike grounds, graceful driveways and beautiful gardens, and beyond these the busy city and its scenic surroundings. From every point of view these princely estates appeal to the aesthetic, the romantic or the prosaic tastes of man, unique in conception, perfect in design. It is from this happy vantage-point that the senators must look out with pride upon the busy city of their creation, in point of years a mere youth compared with her sister cities of the Commonwealth, but in point of strong, vigorous development a colossus. The visitor's first impressions of the place are favorable from whatever direction he may enter the town, and as he strolls about the streets and becomes better acquainted with his surroundings this impression grows to one of admiration. That the town is taking on a rapid yet healthful growth is evidenced by the scores of neat and, in many cases, handsome residences just finished, and by the various new public buildings and business houses. The city is being paved with vitrified brick at considerable cost, including six blocks of roadway in the busiest streets, and the county is erecting a handsome courthouse which, when completed and furnished, will cost \$150,000. This building is of gray sandstone, with cut

trimmings of the same, all of which is quarried in the vicinity. With its arches and graceful tower the building will present a handsome exterior. Its interior furnishings and equipment will be of the best. Another building of prominence is that going up in the business quarter at a cost of \$50,000, which will be used for stores, offices and flats. It is of brick, three stories, and presents an imposing appearance.

An enterprise which the building of has given employment to many, and whose operation now is giving work to many more, is the tanning plant. This industry, when at its full capacity, will employ 150 men. An ice factory with capacity for thirty tons per day is another industry about completed. Across the river, on an eminence overlooking large grounds, looms up the brick outline of Elkins College, two stories of which are completed, while across the town to the west is seen the dome of the Davis Memorial Hospital. This last was on the 8th of October opened and dedicated to the uses for which it was intended, and presented to the community by Mr. Davis, a memorial to the memory of his wife. The hospital complete, without the grounds, cost \$50,000, and is liberally endowed. Its building is most substantial in brick, stone and steel, of ample proportions, and has accommodations for patients in wards and private rooms. It is supplied with the most modern equipment, and is prepared to furnish all the facilities that advanced thought and professional skill have devised.

There are abounding other interests in and about the town of Mr. Davis' promoting, but it was to learn from the senator himself of his present and future plans for great public enterprises that I called at his home, "Graceland." Mr. Davis was absent, but his private secretary, Mr. C. M. Hendley, who is thoroughly conversant with the senator's business, cordially accorded me all desired information, and it is therefore from such high authority that I shall speak concerning Mr. Davis.

Since the sale to the Wabash of the Davis-Elkins interest in the West Virginia Central & Pittsburg road and the retirement of Mr. Davis from the presidency of that road it had been openly suggested that with advancing years the senator would wish to retire, in a measure, from the more active duties imposed by the promotion of great undertakings, but in this there is error. With the laying down of such responsibility a new field for investment was sought, the far-reaching purpose of which may prove of yet greater benefit to the State than any conception Mr. Davis has yet worked out. For years he has recognized the great need for a commercial highway through the center of the State affording a ready communication between the northern, southern and central districts. A line constructed to meet such public needs could only be accomplished at great cost, a proposition which it seems none other than Mr. Davis was willing or able to finance. At present travel from the northern part of the State for Charleston and section must either go west by way of Parkersburg or east by Washington, a choice that involves in either case a cir-

cuitous journey—the circumference of a half-circle. When Mr. Davis' remedy for this condition is realized the public will be offered an unbroken and direct line from Cumberland in the north to Charleston in the south portion. This it is proposed to do by building 111 miles of road, filling in the gap between the C., C. & S. and the C. & C. railways. To effect this most economically the Charleston, Clendennin & Sutton has been merged with the organization of the Coal & Coke road. Over the Charleston division that road now operates trains as far as Otter, sixty-five miles north from the capital, while from the northern end trains over the C. & C. may run trains some twenty miles out from Elkins. These two unfinished ends are therefore being extended to a meeting-point. From either terminal large forces are at work, and the progress will be as rapid as the now uncertain weather conditions permit. By January 15 next it is hoped to have the first twenty-eight miles of the extension on the Charleston division completed. This will carry the road from Otter to the crossing of Elk river, six miles south of Sutton. Here will be a temporary terminus and a permanent divisional point. Large machine shops are to be established there, and the new town which these improvements assure will be called Gassaway.

From the Elkins end of the C. & C. the extension to Frenchtown has been completed, so far as grade work is concerned, and only the delays caused by opening tunnels can prevent the early completion of the first fifteen miles. Two such obstacles are to be overcome, but as forces are employed from either end of the tunnels, the progress has been satisfactory. From Frenchtown the course of the road will probably cross the B. & O.'s Sutton division at or near Burnsville. When spring opens the unfinished gap of seventy miles between Frenchtown and Gassaway will again be under construction, and the work completed within the year.

Besides opening up an important highway through the State and traversing a section rich in natural resources, the railway is expected to develop the coal holdings of Mr. Elkins which he has recently acquired, lying principally in the counties of Randolph, Barbour, Upshur, Lewis, Harrison, Braxton and Gilmer. But independent of the traffic such vast enterprise will assure, the road is expected to derive more than a sustaining revenue from its passenger and through freight business.

The completion of this road and its attendant development means much for both Charleston and Elkins, more especially the latter, as, besides the extra business accruing, it is sure to mean the putting in of terminal facilities there, including a roundhouse, and possibly shops. Elkins will then have, to all intents, four distinct railway lines—the W. Va. C. & P., the C. & I., the B. & O. and the C. & C.—connecting it with every outlying district from which the town may expect to draw trade. As far as human forethought can discern, Elkins has a future better than which has not come under my observation in a tour of the State. With such powerful agencies for material welfare at hand, there is no limit to her possibilities.

Other valuable trade that finds its market in Elkins is that which comes from the territory along the Roaring Creek & Belington, a short line railway that reaches some large and powerful interests. Six miles up this run is being established the town of Coalton, where is just completing the largest operation of the Davis Colliery Co. This organization was until lately the Junior Coal Co. of West Virginia. In the new company the

interests of Mr. Davis and his son predominated, as heretofore. With a capital stock of \$3,000,000 the new organization controls an area of 22,000 acres of land, twenty-five miles of railroad and the Junior and Harding plants. At Coalton the very extensive improvements include a number of new openings and the enlargement of the plant. Three hundred coke ovens are building, nearly all of which are ready to be fired; a new steel tipples has been erected with capacity for 5000 tons per day, a steel bin for the storage of slack coal with capacity for 1500 tons, and a complete electric-power plant. Throughout these improvements the most modern in every line has been sought, making it, as Mr. Davis declares, a perfect plant, probably the finest in existence. The main office of the company is at Elkins, with branch offices in five of the leading cities of the country. Thus it will be seen that the proposition is a large one, but one that is apt to develop rapidly under the wise guidance of West Virginia's veteran coal operator and the active management of his son.

In my interview at the residence of Senator Elkins it was learned that the field of his more recent undertakings of an industrial nature are to be found in the northern counties of Monongalia and Preston. Here the senator has a large proposition in the building of another railroad and the immediate development of various coal-mining properties. The railroad is a 35-mile extension of the M. & K. (Morgantown & Kingwood) between Masontown and Kingwood, and thence to Rowlesburg, which work is being rapidly pushed. In this territory the senator owns about 40,000 acres of coal land, which, of course, the improvement is mainly designed to develop, but besides this personal interest, the road will open up an important connection between two opposite points of the B. & O. and will command a business other than that created along its own line. Mines are now being opened by Mr. Elkins on the completed portion of the road along Deckers creek, in Monongalia county, and on the extension, or new portion of the road, other mines beyond Masontown, in Preston county, are opening. At both of these localities a large number of coking ovens are being built. In Preston county on the new line mines will be opened at Green's run, and also at the mouth of Muddy creek.

THE LEVEE CONVENTION.

Comments of Press and People Upon the Special Issue of the Manufacturers' Record.

The efforts of the Manufacturers' Record, through its special issue containing the full official report of the convention of the Mississippi River Improvement and Levee Association, to intensify and concentrate into effective action the plans for an undertaking of far-reaching importance for the country, have been welcomed by expressions of hearty commendation and encouragement. Last week a number of letters from United States senators, members of Congress and other representative and influential citizens and editorials from leading newspapers of the country bearing upon the undertaking were published. Others on the same line follow:

For Impounding Upper Mississippi Waters.

United States Senator J. R. Burton of Kansas: I want to heartily commend the enterprise and ability that the Manufacturers' Record has shown in making this publication. It affords me valuable information indeed. I shall communicate with you again after more fully examining it, and call your attention to the im-

portance of handling the waters in the upper reaches of the streams as a supplement at least to flood prevention lower down. I am not opposing the construction of levees, but I am firmly convinced that a great deal can be accomplished by the impounding of the waters, not in large reservoirs, but in hundreds of thousands of small ones constructed in the extensive catchment areas in the upper reaches of the river and its great tributaries.

An Invaluable Aid to Workers for Levees.

Congressman B. G. Humphreys of Mississippi: I am a very earnest advocate of the levee system, and believe the time is near at hand when the Mississippi and Ohio rivers will be successfully confined to their banks by a system of levees extending to the Gulf. I shall devote my time in Congress to the promotion of the success of this undertaking as the subject of most vital interest to the people of my section, and believe the Levee Supplement to your recent issue will prove an invaluable aid to those of us here who are making the fight for this consummation so devoutly to be wished.

A Work of Public Spirit.

D. R. Francis, president Louisiana Purchase Exposition, St. Louis: I have read the proceedings with both interest and profit. I have a full comprehension of the value and magnitude of the work in which the association is engaged, and congratulate you upon your enterprise in giving so full a report and wide distribution of its proceedings. It is complimentary to the public spirit and patriotism evinced by your publication.

Deserves All Praise.

John L. Vance, president Ohio Valley Improvement Association, Columbus, Ohio: I have examined most carefully the Supplement containing proceedings of the New Orleans convention. It deserves all that can be said in its praise. I read with much pleasure your address; it is invaluable.

Federal Control of the Levee System.

[New Orleans Plaindealer.]

The current number of the Manufacturers' Record of Baltimore, Md., contains a complete report of the proceedings of the convention recently held in New Orleans to advocate the federal control of the levee system. The report occupies a 32-page supplement to the regular weekly number. All the addresses delivered before the convention will be found here in extenso, together with President Roosevelt's commendatory letter to Mr. Parker, and the resolutions reported by the committees. To these details is added a collection of "opinions" by prominent men in all parts of the country, advocating the principle in behalf of which the convention was held. The Manufacturers' Record, while primarily a trade paper, takes an interest in everything which makes for the upbuilding of the South, among which may be grouped the Levee Convention. In publishing the proceedings of this memorable meeting it shows commendable enterprise and a laudable desire to make the public fully acquainted with the objects and reasons of this movement.

Entire Mississippi River Problem Presented.

[The Homemaker.]

Every one interested in the subject discussed in this convention should without fail secure a copy of this special number of the Manufacturers' Record. The addresses contained an excellent presentation of the entire Mississippi river problem by men who have made a special study of it for years, and whose personal observation of actual conditions on the rivers give an added value to their conclusions.

Richest Land in the World.

[New York Times.]

The Baltimore Manufacturers' Record published in its latest issue, dated November 26, an extended report of the Interstate Mississippi River Improvement and Levee Association convention lately held in New Orleans. Many pages are devoted to stenographic reports of the addresses made. The convention appealed to the country to make the building of levees on the Mississippi and the reclamation of some 20,000,000 acres of "the richest land in the world" a national work.

Devoted to the Interests of the South.

[Columbia (Tenn.) Democrat.]

The current issue of the Manufacturers' Record gives a full official report of the Interstate Mississippi River Improvement and Levee Association, which met in New Orleans October 27 and 28. This meeting, and the full account containing the speeches made, will prove of interest to the entire country, and the South in particular. The Manufacturers' Record is published at Baltimore, and is a leader of its kind, being devoted to the interests of the South and the upbuilding of its manufacturing and other allied industries.

In the Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., December 7.

The statements that have been so freely circulated concerning the small supply of iron in the hands of melters is fully confirmed by the character of the buying as shown of late. All classes of the trade have participated in it, and now, at a season of the year when the demand is usually of a perfunctory character, there is a demand that is expected only in seasons of active operations. The demand has covered all the grades and in the usual proportions. Eastern points that were prime factors in pressing a decline have turned and become buyers and have been and are now taking it at an advance of fifty cents per ton over the low-water mark on the recent decline. While the magnitude of the sales during the past week were less than those of the preceding week, they were nevertheless large enough to characterize the market as one of activity. It should not be a matter of surprise if during the remainder of this month the demand eased off; in fact, it would be a matter of astonishment if it continued good, as we are now face to face with the holidays, when the demand is always of a nominal character.

The buying has not been confined to any one section of the country, but the orders have been pouring in from all quarters. Those who held off at \$9 for No. 2 foundry, with the expectation of still lower prices, are now coming in and taking it at \$9.50. And it is less trouble to get that now than it was to get the lesser price. A few sellers who are pretty well sold up to output for this month and January are practically out of the market for those deliveries, and they have such faith in the future of values that they will not price for delivery beyond January, except at a material advance over current values. The feeling is almost unanimous against quoting for long delivery, and when it is done, the cases are the exceptions that prove the rule. While one can say that the base price is now \$9.50 for No. 2 foundry, as a rule, he can also say that some iron can yet be had at \$9.25. But the sellers at this figure are largely in the minority, and the quantity to be obtained is limited.

There is still irregularity as to the price difference between grades. Nominally, it is fifty cents, but it is not infrequently lowered to twenty-five cents. Circumstances govern sellers' action on this point.

As to the export business, it has been limited. Some small orders have been negotiated, but there has been nothing of consequence concluded until Friday of last week, when an order for 6000 tons was worked. Every effort has been made to ascertain the particulars of the sale, but without success. The seller won't even admit the sale. But the information was derived from such sources that your correspondent has no doubt of its correctness. He also learned from equally as good sources that the sales of iron for delivery during the current month by one of our leading interests will approximate 60,000 tons. To this amount add 45,000 tons that the Sloss-Sheffield Co. expects to ship this month, and we have over 100,000 tons due to be shipped out the current month by two interests. It is within the limits of a conservative estimate, therefore, to place the shipments out and due this month at at least 150,000 tons. This ought to convince all doubting Thomases as to the activity that has prevailed in the market.

We won't ship during this month all the iron that is due for delivery on account of deficiency in car supply. A good part of it will be deferred until the succeeding month. When all these sales are loaded out there will be a big hole made in the stocks in furnace yards, sufficient to convince the most skeptical of the genuineness of the activity reported. One sale of 1000 tons was made, covering delivery up to March, on the basis of \$9.50 for No. 2 foundry, and there were other sales of iron ranging from 1000 to 5000 tons on the same basis. There was a raft of orders of all dimensions as to quantity, and in the majority of cases the minimum price was exceeded. Your correspondent saw several letters confirming purchases on the basis of \$9.50 by telegram from parties who had been standing firm to buy at \$9.25. And a fair proportion went to buyers at New England points, who had taken on some as low as \$9 and then concluded to await further developments before they added to their purchases. The weather has been ideal for the accumulation of material for iron-making, and everything connected with the weather has been in favor of the furnaces. With the advent of bad spells, now due at any time, we will have difficulties in the way of turning out normal outputs, and we should therefore anticipate some falling off in amount of iron made.

The pipe works still report a good business, and are optimistic as to the outlook for the near future. For important lots of pipe the quotations are as follows: For four-inch, \$23.50; for six-inch, \$23; for 8 to 16-inch, \$22, and for the heavier sizes the quotation is \$21.50. For the smaller sizes there is a very fair demand, while for the large sizes the demand is restricted, as is the usual case at this season of the year.

It is announced from sources that ought to be well posted that we are to have in the near future a new steel mill, a rolling mill and a spike factory. Chicago parties are credited with fathering the enterprise. Besides these, we have been visited by an Eastern party to investigate the inducements offering for the establishment of a silk mill in this district.

The Pennsylvania people who some time back bought a coal property in the New Castle neighborhood have been developing the mine, and now announce that they will commence shipments some time in January, upon the completion of the spur now building from the Louisville & Nashville main line. The enterprise so far represents a capital of \$90,000, and Walter Kennedy of Philadelphia is one of the leading spirits of the enterprise.

The Brinkle & Redding Co. of Dayton, Ohio, will erect a plant for the manufac-

ture of a non-intoxicating beer that will require a capital of \$65,000.

The sale of about 29,000 acres of land carrying coal and iron, and situated in Walker county, is noted. W. H. Jourdan of Corinth, Miss., was the purchaser. For the present it will be held as an investment. Much interest is being manifested in the erection of a gigantic statue of Vulcan, made from Alabama iron, to be placed on exhibition at the exposition at St. Louis, and a mass-meeting is to be held tonight to express the public feeling concerning it. It is mentioned to illustrate the growth of a public feeling that is always developed when the spirit of progress is leading to development of natural resources.

The terminal accommodations for the traveling public here, which, when they were erected, it was supposed would be ample for all demands for a half-century, are now found to be too constricted, and a movement has been inaugurated to erect a new station or to add to the one now in use. It is a question of but a short time when one or the other will be accomplished.

J. M. K.

TO CURTAIL PRODUCTION.

Proposed Meeting of Southern and Northern Cotton-Mill Men.

[Special Cor. Manufacturers' Record.]
Charlotte, N. C., December 8.

At a meeting of cotton manufacturers here today steps were taken looking to national curtailment of production, to be brought about by a partial shutdown of all the mills of the country. The meeting was very largely attended, among those present and taking part being a number of representatives of New England mills. The gathering represented 949,120 spindles and 24,965 looms.

J. M. Odell, the Concord mill man, who called the meeting, was made chairman, and in his opening address said that curtailment was the only solution of a very serious situation which confronted the mill men. Manufactured goods, he said, are no higher now than they were when cotton was at eight cents, and not only the South, but New England and the manufacturing world, must get together.

B. Frank Mebane of Spray telegraphed from New York suggesting the calling of a national manufacturers' association meeting in Washington and then have the time and place named, inviting European spinners' co-operation.

Mr. Alfred A. Thompson of the Raleigh Cotton Mills made a motion that the necessity for national curtailment be considered the sense of this meeting. "As matters stand," said Mr. Thompson, "we are in the hands of the commission men, some of whom are our friends, and are here. We want a curtailment that will advance the price of the product of the mills. This must be general, and not confined to North or South Carolina or Georgia, or to New England. Curtailment even in which England will participate is the kind that is needed, and should be secured. We want a curtailment that will curtail. Our friends who have on hand a moderate supply of cotton would do well to sell it rather than convert it into manufactured products, and all yarn or weaving mills would be wise to run on short time, say four days in the week."

Mr. Thompson suggested that a meeting should be held in Washington, at which representatives of manufacturers from all parts of the world might discuss this great question on a common ground. "If we don't want the next two years' business ruined we must curtail," said the speaker. "I know of no mill man who has a supply of cotton that will last him longer than six months."

Mr. Thompson took occasion to predict

a large cotton crop for next year. He said that for two years farmers had raised over 11,000,000 bales when cotton was selling at only six cents, and he did not see why any crop could possibly be small when cotton commands 11.30 a pound.

Col. T. M. Swift of Elberton, Ga., made a brief speech, in which he declared his sympathy with the object of the meeting and his belief that curtailment is the only solution of the problem.

Mr. Thompson's motion was referred to a committee, which reported the following:

"With the view to securing national curtailment, which we think absolutely necessary, we recommend that a committee of fifteen be appointed by the Chair to meet in Washington city; that Southern, Northern and New England manufacturers be invited to appoint a similar committee, and that the joint committees formulate a feasible plan looking to the curtailment of production throughout the United States, and that this joint committee immediately convene a national meeting of manufacturers at such place and date as they can agree upon."

In the discussion which followed W. C. Heath of Monroe, president of the American Cotton Manufacturers' Association, stated that he did not think it would do any good to attempt to curtail unless a forfeit was put up that would be binding upon all men concerned in the matter. He thought that immediately following the meeting there should be held in the different Southern States meetings of manufacturers, at which committees could be appointed, and the sentiment of the bodies could be expressed at a meeting to be held conjointly with the New England or Northern people. He said the meeting would be unwise to put itself in a position where it seemed to try to depress the price of cotton. Curtailment is all right, but not now. Curtailment should not begin before July or August, when the proper care could be taken of the operatives. Mr. Heath criticised the tendency that sought to damn the speculators; was tired of hearing this censure of Brown and Sully and Frank Hayne. He knew that two-thirds of the men before him did what was termed gambling in the cotton market.

Mr. Heath's position was somewhat in contrast to that of Mr. W. A. Erwin of Durham, who condemned the speculators and declared that immediate curtailment was advisable. He also declared for the necessity of taking kindly care of all operatives, who would understand the position of their employers.

Mr. George B. Hiss took the view advanced by Mr. Heath, declaring that there was no use in trying to act in the matter of curtailment unless a forfeit should be put.

The president of the Georgia Cotton Manufacturers' Association was present, and in response to a call for a speech, said that he favored the plan under consideration, and believed that curtailment was the only solution. He thought the price of cotton would remain high. It remained for the manufacturers to regulate the price of their goods.

Mr. A. A. Thompson said he believed Mr. Heath did not thoroughly understand the purport of the motion. He read the motion again, and upon a cry for "question" it was passed with one dissenting vote.

Following is the committee appointed by Chairman Odell to meet in Washington: W. A. Erwin, Durham, chairman; Alf. A. Thompson, Raleigh; Jas. W. Cannon, Concord; J. M. Odell, Concord; W. C. Heath, Charlotte; Eugene Holt, Burlington; W. H. Williamson, Raleigh; W.

H. Watkins, Ramseur; Chas. W. Johnston, Charlotte; Walter L. Holt, Fayetteville; B. Frank Mebane, Spray; Caesar Cone, Greensboro; S. B. Tanner, Henrietta; Dr. John H. McAden, Charlotte; F. Dilling, Kings Mountain; Allen Rudin, Hillsboro, substitute.

After the other committee called for has been appointed the chairmen of the two will confer and set the date for the Washington meeting. Mr. Odell says that this meeting will be held at the earliest practicable date.

SALES OF STORAGE OIL.

Large Lots at Sour Lake Reported as Disposed Of.

[Special Cor. Manufacturers' Record.]
Beaumont, Texas, December 5.

Crude-oil prices at Beaumont, Sour Lake and at Jennings have been further strengthened by the reported sale of several large lots of oil in storage at Sour Lake. It is stated authoritatively that C. W. Brooks & Co. have negotiated the sale of approximately 285,000 barrels of oil in the earthen tanks of the Mutual Storage Co., a concern organized early last summer. The purchaser was the Security Oil Co., which operates the refinery formerly known as the Burt plant, located on the Neches river, in South Beaumont. No official statement as to the price paid for this oil is obtainable, it being the particular desire of the purchasers to keep it quiet, but it is stated that the figure is near sixty cents a barrel, the buyer to take the oil without expense to the seller. Under the terms of the contract the Security Oil Co. is to take 10,000 barrels a day until all the oil has been moved. This it can easily do, as it operates an eight-inch pipe line from Sour Lake to Beaumont having a daily capacity of 20,000 to 25,000 barrels. At the same time it is stated that the Moonshine Company has sold approximately 100,000 barrels of oil in storage at Sour Lake to the Security Company at the same price as that paid for the Mutual Company's oil. The greater part of the oil in the Mutual Company's tank was bought at twenty-five cents or under; the profit on the deal, therefore, represents a very large sum. The Moonshine Company has produced nearly all of the oil which it has sold. The principal owners of the Mutual Storage Co. are Capt. Wm. Wiess of Beaumont, Judge R. E. Brooks and C. W. Brooks & Co. The Moonshine Company is operated by J. S. Cullinan, W. B. Sharp and associates. These two sales include more than half of the oil in storage at Sour Lake, excluding that held by the Texas Company, the Guffey Company and other marketing concerns. A further advance in the price of crude at Beaumont and Sour Lake will be the natural result in the course of a few weeks unless new production is secured in sufficient quantity to supply the discrepancy between consumption and the present production. A careful canvass of the Sour Lake field indicates that the production there is about 41,000 barrels a day, while at Beaumont it runs from 16,000 to 17,000 barrels a day. The daily demands are figured at about 75,000 barrels, and the discrepancy between production and demands is being made up by moving oil out of storage at Sour Lake. The price at Beaumont and Sour Lake in tanks is near sixty cents, and on cars sixty-five cents. The same price prevails at Jennings. In August the price at Sour Lake was ten cents a barrel.

Dividend payments this month by Beaumont oil companies will be large. The Texas Company will disburse 3 per cent., or \$90,000. The Heywood Company will pay an extra dividend of 2 per cent., or \$16,000, which will be in the nature of a Christmas gift to the stockholders, and will not interfere in any manner with the

regular quarterly dividend in January, amounting to 3 per cent., or \$24,000. The Lone Acre Oil Co. will pay 25 per cent. this month, or about \$20,000, and payments by other companies operating here and at Sour Lake will bring the total up to fully \$150,000.

An oil strike is reported in Matagorda county, Texas. Several well-known land boomers who are interested in that section have confirmed the report, but the oil men are waiting to be shown.

H. S. REAVIS.

LAKE BORGNE CANAL.

Example of Southern Development by Northern Capital.

[Special Cor. Manufacturers' Record.]
New Orleans, La., December 5.

Lake Borgne canal transportation, by which trade facilities are vastly increased in a territory extending from New Orleans to Mobile via the Mississippi sound, is a present development of importance to New Orleans and illustrative of opportunities which Northern capitalists are finding here for the profitable employment of their surplus means. By the operation of barge lines on this canal a vast saving of time and expense is secured in the shipments of lumber from all the points along the Mississippi sound to New Orleans, and on the completion of the government locks on the Warrior and Tombigbee rivers there will be a reduction in the cost of coal transportation which should enable not only steamships, but local manufacturers as well, to profitably use the coal of the Alabama fields in competition with that from any other place.

Incidental to the canal transportation development there is to be built up an industrial center and trading point where the canal joins the Mississippi river, which is some miles down from Canal street.

The canal from the Mississippi river to Lake Borgne is, like the isthmian canal, no new proposition. It was planned at least sixty years ago, and construction was begun thirty years ago, at which time State aid was secured to the amount of \$480,000. Since then private capital has brought up the total expenditures to almost \$750,000. The present Lake Borgne Canal Co. was incorporated in 1900. Its president is Mr. William P. Ross, and among its stockholders are many of the best-known business and professional men of New Orleans.

The present activity here was brought about through the lease of the canal and property rights, including an average of 500 feet of ground on each side of the canal, to an operating company known as the Southern Transportation Co., of which John H. Williams of New York is president. The directors of this company are all Southern men, but some large Eastern capitalists are heavily interested in the enterprise, and on the demonstration of a profitable operation of this undertaking it is declared that much greater investments in that section depend. The transportation company, which is capitalized at \$1,000,000, took a lease on this property a few months since for twenty-five years, with option of purchase, and already has contracted for and expended \$30,000 in improvements and equipment. Some bridging was found desirable, but in the main the canal was in good physical condition. The canal is connected with the river by a lock 280x40 feet in area and 7 feet deep, with gates 40 feet wide, passing craft 38 feet in width. The first three miles at the river end are artificial; the remaining four miles into Lake Borgne is a natural bayou. The depth of the canal is from 7 to 8 feet.

So far the transportation company has engaged almost exclusively in hauling the lumber originating along Mississippi

sound. Nothing will be attempted in the way of handling coal until the government has completed the Warrior river locks and dams, probably two years hence.

Though having no land for sale, the location of industries will be encouraged by the company on a leasing arrangement. Already a shipwright plant is arranged for at the mouth of the canal, which is to be operated by pneumatic tools, and a lime plant to utilize the vast prehistoric deposits of clam shells from the lake is another enterprise assured.

In connection with this development the Lake Borgne Realty Co., promoted by Col. W. P. Curtis, has bought some 15,000 acres of land around Lake Borgne on both sides, and also a considerable tract along the Mississippi at the point where the canal connects. It is proposed by this company to put up a large saw-mill in the vicinity of the locks to utilize the heavy growth of cypress, tupelo gum, ash, maple, etc., which cover a large portion of the company's holdings. After the timber has been cut it is the company's plan to sell the lands for the cultivation of rice and sugar. These and the prairie marshes are illustrations of the possibilities which lie in the very back-door yard of New Orleans. All sweet marsh—no salt water—they have been declared by soil experts sent out by the government to be capable of raising well-nigh everything. The soil is of marvelous depth and the swamps are easily drained. Many thousand acres of such swamps surround New Orleans which can be bought now at \$5 an acre or less, which when drained and improved would yield more than Illinois lands, for instance, which sell for \$100 an acre and more.

"It is the company's intention," said Colonel Curtis to me, "to lay out a manufacturing town at the mouth of the canal, which we will possibly name Borgne-mouth. Our company has no connection with either the canal or the transportation company, but as they have no lands for sale, we shall doubtless work in harmony in the development of the section. As soon as we get possession of the property we will put up a lot of tenement-houses, the demand for which is so great they have already been rented. For this we shall utilize the canal side, reserving the river-front lots for business purposes. Unless the New Orleans Railways Co. decides to extend its line to the new town, we will build to a connection with its lines. We are seven miles below the United States barracks and four miles below Port Chalmette. Quite a number of people have expressed a desire to become interested in our enterprise, and we are already negotiating with parties for a cannery, planing mills, sash and door factory, etc. With half a dozen manufacturing plants there I don't see any reason why there shouldn't be a right smart town built up here within the next four or five years."

ALBERT PHENIX.

TO FIGHT THE BOLL-WEEVIL.

Practical Campaign Mapped by a Louisiana Convention.

As a result of the meeting at New Orleans last week of 200 persons representing the many phases of the cotton trade, the Louisiana Boll-Weevil Association was organized and legislation was planned for an immediate special session of the legislature, which is to meet for twelve days to devise means to combat the boll-weevil. The recommendations of the convention were as follows:

"1. It should be made a crime, punishable by heavy fine and imprisonment, for any firm, person or corporation to bring into this State, or to have in possession, except a duly recognized State or federal entomologist, for any purpose, any living

Mexican boll-weevil or any cotton bolls, squares or plants of seed containing the adult, pupa, larva or egg stage of the Mexican boll-weevil.

"2. An act prohibiting the shipment into the State of any cottonseed or any other farm products from any State or consigned from points within any State where the boll-weevil exists without being accompanied by a certificate signed by duly authorized State or government entomologist stating that cottonseed or other farm product has been thoroughly fumigated in such manner as to kill the boll-weevil in any of its stages.

"3. An act creating a crop-pest commission, to be composed of the governor as the ex-officio chairman thereof, commissioner of agriculture, director of the State experiment station, the State entomologist and two experienced cotton planters, the two latter to be appointed by the governor, all of the members thereof to serve without compensation except actual traveling expenses, and conferring on said commission full and plenary power to deal with all crop and fruit pests and such contagious and infectious diseases as, in the opinion of the commission, may be controlled or eradicated, and with power to make, promulgate and enforce such rules and regulations as, in their judgment, are necessary to control, eradicate and prevent the dissemination of all injurious pests, as far as may be possible, and conferring on said commission the power and authority to make all rules and regulations deemed expedient in relation thereto, and said rules and regulations to have the full force and effect of law, so far as they conform to the general laws of the State and of the United States.

"4. We recommend that the general assembly of the State appropriate the sum of \$25,000, or so much thereof as may be necessary, to enable the crop-pest commission herein recommended to deal with the subject of the prevention of the spread of the boll-weevil and the eradication of the same, as well as all other crop pests. Respectfully submitted."

The resolutions adopted by the convention look to co-operation among the proper authorities of several States to secure the enactment of preventive laws, to the assistance of the federal government for the eradication of the pest and to the publication by the press of the South of the following:

"That we beg to caution the farmers of the State against the introduction of the boll-weevil on their respective farms by importations from Texas of foodstuff, such as hay and corn and other products, such as cottonseed hulls and meal, and to urge extra care in the premises.

"We also urge them to make every effort to comply with the recommendations of the agricultural department of the State in any precautionary methods which may be suggested by it.

"We especially advise against publicity of reports of the existence of the weevil in any particular locality until specimens have been sent to the station entomologist at Baton Rouge and his report thereon is made.

"We deprecate sensational and unauthentic reports regarding the existence of the weevil in any particular locality, for the reason that such reports, not having the sanction of official or scientific examination, are apt to unnecessarily alarm the public and are very liable to mislead as to the genuineness of the insect."

A party of capitalists, made up by a firm of Philadelphia brokers who are endeavoring to increase interest in certain Southern investments, have been entertained in the Carolinas during the past week.

SULLY'S MESSAGE TO THE SOUTH.

Raise More Cotton and Better Cotton and Don't Worry About Foreign Competition in Its Production.

[New York Correspondence Manufacturers' Record.]

I today called the attention of Daniel J. Sully, the most active figure in the cotton world, to the notes of alarm that are being sounded from various quarters, lest high-priced cotton may so stimulate determined search by foreign consumers for new areas capable of producing cotton as to create a competition that may prove damaging, if not disastrous, to the South.

"We ought not," said he, "to look at this question either from a narrow or a selfish point of view. Cotton famines will do the South infinitely more harm than can ever result from the opening up of a new cotton-producing field in other lands. Famines would mean a repetition on a larger scale of the deplorable conditions which prevailed last summer in the Lancaster, England, manufacturing district, where bread and meat for 150,000 operatives became a matter of acute public concern as a result of shutdowns due to lack of cotton. Every such experience to a greater or less extent cripples the world's ability to handle our cotton crop. For, when the people upon whose labor a great industry depends are weakened physically, mentally or morally, and discouraged by lack of necessary nourishment or lack of such comforts as are necessary to health and strength, one of the consequences is that the industry itself sustains a serious setback.

"Such famines," he continued, "with the resultant human distress and intimidation of such capital as may be looking to the establishment of new cotton mills and the betterment of those already in existence, will in the long run do the South infinitely greater damage than any possible extension of the world's cotton-producing area. All the aggressive commercial enterprise of foreign nations exerted for the extension of markets for their cotton fabrics has tended to augment the world's use of cotton products generally, and has therefore been of great value to the South. And so it is plain that any paralysis of cotton manufactures either in America or Europe will react injuriously on Southern growers primarily and ultimately on the country at large.

"For these reasons," Mr. Sully continued, "we must look at the situation not with a view to restriction, but to expansion. We should realize how important it is to the South for the mills of the world to be kept running on a profitable basis with employees adequately compensated. At least in so far as fair compensation may be necessary for the maintenance of that degree of health and strength necessary for their encouragement in the doing of good work.

"With this end in view," he proceeded, "our primary aim should be to raise more cotton and better cotton, and not worry in the least about a possible repetition in cotton of what occurred in wheat when foreign government experts taught the people of Argentina how to raise enough wheat partially to supplement occasional American shortages.

"The world's takings of cotton goods," he proceeded to say, "are increasing so fast that, do what we may, we cannot supply the raw material which, barring such blighting stoppages as might be produced by famines, the cotton mills of all nations will require and will be quite willing to buy at figures largely in excess of those that have been prevailing during recent years. Concerning the possibilities of cotton production in other lands, it is a fact that for more than half a century the best

agricultural skill of Europe has been engaged in the endeavor to find new fields, just as our own Department of Agriculture has been engaged in efforts to discover within the United States areas adapted to the growing of tea, silk and various other products which we now import.

"In consequence of the cotton famines that resulted from our Civil War this long-continued effort on the part of European spinners and their governments to find new cotton-producing areas received an unprecedented impetus, and the approaching crisis in raw material having been anticipated by the foreign spinner, has brought out renewed efforts in the same direction."

"But," I asked, "is it your opinion that the effects of the existing eagerness to find new cotton-growing regions will be successful to any appreciable extent?"

"Yes," he replied, "just as the persistent scientific research and experiment, prompted in this country some years ago by killing frosts in the orange districts of Florida, resulted in the discovery of hardier varieties of citrus-bearing trees, and just as the seedless orange was evolved by our Agricultural Department, so, in the course of time, will some sort of improved, I might say, more adaptable, species of cotton plant be evolved through the vigorous efforts now being made by foreign workers in the field of scientific agriculture. The process, however, will be one requiring years for its development. Through this process, call it what you may, hybridization, evolution or combination of varieties, the South may prepare itself to expect in time to see competition in cotton production, but the duty of the South, in order to maintain her supremacy, is clearly to bend every energy to the improvement, both in quality and quantity, of the staple which is today the most valuable money crop of the world. Raise more cotton and better cotton, and don't worry about outside competition in its production."

* * *

And this is the message which the man who today is most conspicuous in the cotton markets of the world sends through the Manufacturers' Record to the people of the South.

It is a matter for congratulation that this man is engaged so earnestly and actively in keeping up the agitation which he started a fortnight ago, designed to arouse the people of the South to a realizing sense of the damage that is resulting from the planting of impoverished or deteriorated cottonseed. Commenting on this evil in a long interview that appeared last Sunday in one of the New York dailies, he went to the very root of the question in the following paragraph:

"You cannot look for any change in the South until the danger from the impoverishment of the cottonseed is brought home to the planter. At present he is blind to this menace. The present crop will bring to him at least \$150,000,000 more than any other crop he ever raised. That would seem to prove that he is favored by fortune. The crop of next year perhaps will bring even much greater returns. But there is an end to all things, and sooner or later it will be realized that what is now a godsend may bring about disaster."

By his clear-cut diagnosis of the disease and its remedy he has furnished another example of characteristic capacity for the

thorough mastery of every subject to which he devotes serious thought or study. No change can be looked upon until the alarming consequences of planting inferior seed is brought straight home to every planter in the South. Think of it, the yield of cotton per acre has in the last five years, by a steady process, fallen off until it is less by fifty pounds now than then. In 1898-99 the yield per acre planted amounted to 232 pounds; in 1899-1900, 210; in 1900-1901, 211; in 1901-1902, 188; in 1902-1903, 188; in 1903-1904 (government estimate), only 176.

THOMAS P. GRASTY.
Hotel York, New York, December 8.

Pipe Made at Lynchburg.

[Special Cor. Manufacturers' Record.]
Lynchburg, Va., December 9.

During the latter part of November the trade was advised that the Lynchburg Foundry Co. of Lynchburg, Va., had succeeded the Lynchburg Plow Co. and the Lynchburg Plow & Foundry Co., and they would hereafter continue operating the McWane Pipe Works and the Lynchburg Plow Works, and would manufacture a high grade of cast iron, gas and water pipe, chilled and cast plows, and would also do general foundry and machine work.

The plant is one of the best equipped and most modern of any in the country. Mr. H. C. McWane, the president and general manager, who is so well known, has had sixteen years' practical experience in the manufacture of cast-iron pipe, and he it was who has arranged the equipment for the pipe-works department of this plant, which has been designed in the most up-to-date manner. It has only one pit in operation in its pipe foundry at present, and is making three-inch, four-inch and six-inch cast-iron bell and spigot water and gas pipe, and on May 1 of next year intends to have a second pit in operation, when it will be prepared to make all sizes up to twenty-four inches in diameter. Since it started the manufacture of pipe in March of this year it has supplied over eighty cities and towns, and has never had a complaint as to the quality of the pipe furnished, but, on the contrary, has received a number of unsolicited testimonials praising the quality of the pipe in the very highest terms. Its motto is "quality, and not quantity." It recently secured a contract for six miles of pipe for the village of Blaisdell, Erie county, New York, which has been completed. This town is within ten miles of Buffalo, where a very large pipe foundry is in operation, and though the Lynchburg Foundry Co. was the highest of three bidders, the award was made to it on account of the superior quality of its product. It has now on hand a contract to supply all the pipe and special castings of same for a new system of water-works to be built at Spencer, W. Va. It has shipped its product as far west as South Dakota and as far north as New Hampshire, and has exported three lots to Cuba.

In the planning of the works of the Lynchburg Foundry Co. the pipe-foundry cranes and general equipment were designed by Mr. Edgar C. Wiley of Lynchburg, Va., who has been very successful in this class of work, and who designed and installed the plant of hydraulic jib cranes now giving fine service in the large pipe plant at Radford, Va., and which are said to be the best of their kind in this service. The Lynchburg Foundry Co.'s pipe department is equipped with jib cranes of the belt-power type which have a lifting capacity of five tons. These cranes are subject to hard and constant service, and their design embodies some interesting features. The high-speed

gearing consists entirely of rawhide pinions, meshing with cut gears, which render the cranes smooth-running and almost noiseless. In six months' constant service these gears show hardly any perceptible wear, which, in consideration of the nature of the service, will be a matter of interest from an engineering standpoint. Five-eighths-inch plow steel hoisting cables running over 18-inch sheaves take the place of the old-style chains, and give a smooth and reliable service. The cranes were constructed in the company's own shops, and have given perfect satisfaction since the day they were started.

I. S. FIELD.

The Pig-Iron Market.

Matthew Addy & Co., in their report of December 5, say:

"Continued very heavy buying of Southern pig-iron is the main feature in the market. The tonnage of new orders for November was greater than that of any month since August, 1902, when the late lamented boom was at its climax. December has made a start that indicates the buying movement is still increasing. And it is a most suggestive fact that since the buying of Southern iron on a wholesale scale began it has decidedly changed its character. At first buyers were timid, and only bought for spot shipment. Then they began to buy for shipment thirty to sixty days ahead, while now the market is full of inquiries not only for shipment over the first half of next year, but over the whole of 1904. These long deliveries the furnaces are not willing to make unless they can obtain a very decided premium over present prices. The longest deliveries the furnaces are making at today's prices are over the first quarter. However, considerable business has been placed for shipment over the first half of next year, but at more than today's quotations. A great deal more Southern iron has been sold in the past sixty days than has been made, and before the end of the year furnace stocks will begin to decline. A good deal has been made of these furnace stocks, and they have figured in many a bear argument. As a matter of fact, most of the iron on hand on furnace-yards is of the low and undesirable grades. There is no accumulation whatever of good foundry grades, and what is on hand would not be sufficient in case production were to suddenly cease to supply the wants of the country for a week. The reserve stock of the country is so ridiculously small that it really is a good bear argument rather than anything else. There has been a better demand for Northern iron in the past ten days, and some very fair inquiries are now in process of negotiation.

"The market closes this week firmer in tone and with prices stiffer. There is a much more optimistic feeling in the trade generally; in fact, there is no doubt but that the very heavy sales of Southern iron have materially changed the situation for the better."

New Furnace at Gadsden.

Rapid progress has been made recently on the construction of the Alabama Steel & Wire Co.'s new blast furnace at Gadsden, Ala., and the plant will be blown in as soon as the electrical equipment is in approved condition. This equipment is now being adjusted. The company's power-house will also furnish electricity for operating the Gadsden street railways, which it also owns. The water for the furnace will be pumped to Gadsden, a distance of one and a-quarter miles, through a 20-inch main by two turbine pumps with a capacity of 12,000,000 gallons every twenty-four hours. These pumps are connected direct to motors. The two

generators used are 300-kilowatt three-phase machines, from which voltages of 250 and 500 are taken at the same time.

PIG-IRON PRODUCTION.

Heavy Decrease, With Improvement in Prices Reported.

The Iron Age of this week says:

"Our monthly blast-furnace statistics show how heavily the closing down of blast furnaces has told on the production, which in November, including charcoal iron, fell to 1,074,000 tons, as compared with an average of nearly 1,600,000 tons during the months of July, August and September. Such a drop within the short space of two months is altogether unprecedented in the American iron industry. Yet the productive capacity working on December 1 was lower still than on November 1, the capacity of all the furnaces in the country declining from 282,219 gross tons per week on November 1 to 251,181 tons on December 1, thus foreshadowing a further falling off.

"That these heroic measures were necessary is proven by the fact that even with so sharp a falling off the stocks in the hands of reporting merchant furnaces increased from 597,399 tons on November 1 to 658,107 tons on December 1. An analysis of the returns shows that this increase is distributed all over the country. This is not surprising in the case of the Northern furnaces, which were being sharply undersold by the Southern producers, but it is somewhat perplexing that there was an increase also in the stocks of the latter. The only explanation is that the supplies in consumers' hands must be down to the lowest limit, to which the constant pressure of buyers to secure immediate delivery clearly points. On the other hand, a partial report of the steel works' stocks shows a falling off of about 45,000 tons during November.

"Reports from all the principal distributing centers show a better feeling in the pig-iron markets. A very high tonnage of Southern pig-iron has been sold, a good deal of it earlier in the week, on older options at \$9. Since then the leading makers have successively advanced prices to \$9.25 and to \$9.50 at Birmingham for No. 2, and it is only a few smaller makers who name the former price, which may be withdrawn at any moment. Some of the Northern makers have stiffened up, but on the whole they maintain their former attitude, strengthened in it by the fact that the disparity in the price between the iron of the two sections is lessened."

South Carolina Tin.

Capt. S. S. Ross of Gaffney, S. C., informs the Manufacturers' Record that the first shipment of tin ore from this country to Europe has gone forward from the mine near Gaffney to New York. Captain Ross says that the output of the mine at present does not justify the establishment of a smelter. In somewhat crude fashion, and with a force of eight to ten laborers, he was able to get out between 40,000 and 50,000 pounds of the ore in three months. There is enough ore in sight to warrant the installation of improved machinery.

One day last week the British steamer Anglo-Saxon cleared from Wilmington, N. C., with a cargo of 17,000 bales of cotton, valued at \$1,020,000, bound for Bremen.

It is reported that a lake of asphalt 100x150 yards has been discovered at St. Jo, in Montague county, Texas.

Twenty million feet of lumber were shipped from Jacksonville, Fla., in November.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

MISSISSIPPI'S NEW LINE.

Progress on the Mobile, Jackson & Kansas City Railroad.

According to reports from Memphis, the Mobile, Jackson & Kansas City Railroad is completed and in operation as far north as Beaumont, Miss., the crossing of the New Orleans & Northeastern Railroad. Grading has been finished to Bay Springs, twenty-seven miles north of Laurel, and rails have been laid on this for fifteen miles. From Bay Springs to Newton, twenty-five miles, the grading is to be completed by January 1 and the track-laying to be finished a month later.

Newton is on the Alabama & Vicksburg Railway, and work is just starting north of that place. C. D. Smith & Co. of Memphis, who are the general contractors for the work, are reported to have sublet contracts there to the Worthington Construction Co., Campbell & Woodbury, W. B. Hard, A. H. Bush, Jr., Gibson, Carruthers & Williams, J. A. Hicks, Buckner & Sikes, T. A. Burkett, Woodward & Woodward and Turnipseed & Mosely. This will carry the road sixty-six miles from Newton to Ackerman, on the Aberdeen line of the Illinois Central, north of Ackerman to Mathison, twelve miles. The subcontractors are Peyton G. Harris, Lenox Bros. & Delaney, I. G. Randolph & Co. and George Y. Andrews & Co. From Mathison to Houston, eighteen miles, are J. G. Miller, Hutton & Co., F. A. McClellan and Vaughn Bros. From Houston to Pontotoc, fifty-two miles, the work will be done by A. G. Brown & Co. From Louisville, seven miles south to the Pearl river, a branch contract is given to Lester Bros. & Sanford. The entire work is to be completed by the end of next year.

The subcontractors on the stretch of line now being completed, that between Laurel and Newton, are J. A. Goodman, Rees Thomas, M. H. Thomison, the Worthington Construction Co., George Y. Andrews & Co., I. G. Randolph & Co., C. M. Cooper and A. H. Bush, Jr.

ATLANTIC & BIRMINGHAM.

Further Reports Concerning Plans for Its Development.

Mr. H. M. Atkinson writes from Atlanta, Ga., to the Manufacturers' Record confirming the report that the Tifton, Thomasville & Gulf Railway, the Tifton & Northeastern Railroad and the Atlantic & Birmingham Railroad have been consolidated under the name of the Atlantic & Birmingham Railway Co. Concerning the report that an extension will be made he writes that plans are under consideration, but there is nothing definite to announce at present.

A dispatch from Thomasville, Ga., reporting the meetings of the two roads consolidated with the Atlantic & Birmingham, also says the officers stated that an extension from Montezuma to Birmingham will be constructed immediately with a direct connection to Atlanta and an extension from Waycross to the coast in the near future. It is further stated that \$500,000 worth of rolling stock has already been ordered for the consolidated roads.

From La Grange it is reported that the Atlantic & Birmingham is now building in that direction from Montezuma, its present western terminus, having a large force of hands at work on the grade.

It is further reported that the consolidated roads will be finally made a part of the Seaboard Air Line system; that the

seem long, from Macon to La Grange, Ga., will probably be acquired and used for part of the extension to Birmingham, connection with it being made by building a link from Montezuma to Culloden, Ga., about forty miles, and the line then being extended from La Grange via Anniston to Birmingham. The carrying out of such a plan would give the Seaboard a short route between Birmingham and its ocean terminals at Savannah.

GULF & SHIP ISLAND.

New Passenger Station and a Freight House for Gulfport.

Mr. Willis W. Vail, chief engineer of the Gulf & Ship Island Railroad Co., writes from Gulfport, Miss., to the Manufacturers' Record that on the branch from Mendenhall to Silver Creek, a distance of twenty-nine miles, eight miles of the line is practically completed and in operation. Grading is being done on eight miles more, and there will probably be a total of thirteen and one half miles of track by the end of the year. Next year the construction of this line is to be completed, and probably an extension will be commenced from Silver Creek to Columbia, twenty-seven and one-half miles, connecting there with the terminus of the present Columbia branch.

About fifty miles of 75-pound rail have been laid on the main line, replacing 56 and 60-pound rails. About thirty miles remain to be laid, and will be put in next spring. A combined freight and passenger station at Laurel was built this year.

The construction of the new brick passenger station at Gulfport will start soon. It is proposed to build a number of brick arches and fill in trestles next year. An interlocking signal system will be installed at Gulfport to protect the Louisville & Nashville crossing.

The dredging of the anchor basin is about two-thirds finished, and will be completed about next summer. The channel has been dredged so that vessels drawing twenty-two to twenty-three feet of water can pass. A new freight house for Gulfport will probably be erected next spring. It is possible that another pier about 700 feet long and 100 feet wide will be started some time during the coming year.

Progress on Gould Extensions.

Mr. Samuel D. Brady, chief engineer of the Little Kanawha Railroad Co., writes the Manufacturers' Record that the Zanesville, Marietta & Parkersburg Railroad, forty-three miles long, is under construction from Sharpsburg, Ohio, to Zanesville, Ohio, and about fifteen miles will be completed this month. The rest of the line will be finished as rapidly as possible next year.

When construction was suspended June 1 last on the extension of the Little Kanawha Railroad from Sandy Bend to Burnsville, W. Va., seventy-one miles, all the work had been opened up and gotten under way and some of the tunnel headings were under cover. This was intended to be the eastern extension of the Gould system, but it was afterwards decided to adopt the Buckhannon & Northern route, and the contractors were changed to that line and also to the Zanesville, Marietta & Parkersburg Railway.

The Buckhannon & Northern Railroad has eighty-three miles of line under construction, beginning at the Pennsylvania and West Virginia State line near New Brownsville, Pa., and passing through Rivesville, Fairmont, Grafton and Philippi to Belington, W. Va., where it will connect with the West Virginia Central & Pittsburgh Railway. About thirty miles of this line will be finished by the end of

the month, and the rest is to be completed next year. This road will connect with a new Gould line in Pennsylvania, extending from New Brownsville to Pittsburgh, making a through route.

Texas, New Mexico & Western.

Advices from Dallas, Texas, say that the Texas, New Mexico & Western Railway, recently incorporated there to build a line from Dallas to Roswell, N. M., about 300 miles, has acquired and will use eighteen miles of grade constructed for the old Dallas & Wichita Falls Railway, a line projected years ago and not constructed. The new road is to be built through the following counties in Texas: Dallas, Tarrant, Denton, Parker, Wise, Jack, Young, Archer, Throckmorton, Baylor, Haskell, Knox, Stonewall, King, Kent, Dickens, Garza, Crosby, Lynn, Lubbock, Terry, Hockley, Yoakum and Cochran.

The incorporators of the line are E. P. Spears, Charles Steinmann, C. C. Slaughter, J. N. Wharton, J. B. Lucas, John G. Hunter, M. M. Crane, ex-attorney-general of Texas; J. A. Wilhite, all of Dallas; M. J. Healy of Fort Worth and W. A. Miller of Decatur.

It is reported that the road will be financed in Texas and it will be an independent line, and that the construction contract will probably be awarded in January.

Atlantic & North Carolina.

The Raleigh & Pamlico Sound Railway Co. has, according to a dispatch from Raleigh, N. C., notified Governor Aycock that it desires to tender a bid for leasing the Atlantic & North Carolina Railway, which is controlled by the State. This follows the recent announcement of the incorporation of the Atlantic Railroad Co., which proposes to build a line between Raleigh and Goldsboro, the latter point being one of the termini of the Atlantic & North Carolina Railroad, which it also wishes to lease. The Raleigh & Pamlico Sound Railway is to connect Raleigh, Wilson, Greenville and Washington, N. C., which would make a line connecting the State capital with a tidewater port and running about twenty-five miles north of the Atlantic & North Carolina. A survey is now being made for this new road. It would be possible to build a connection between the Atlantic & North Carolina and the Raleigh & Pamlico Sound Railway, so as to give the A. & N. C. an independent entrance to Raleigh.

North & South Arkansas.

The North & South Arkansas Railroad Co. has been chartered to build a line from or near Ravenden, on the St. Louis & San Francisco Railroad in Lawrence county, Arkansas, northward to the State boundary at or near Elm Grove, in Randolph county, about twenty miles. The contract for grading the first ten miles is reported as awarded, and George T. Dent, one of the incorporators, is quoted as saying that it is the ultimate purpose of the company to connect St. Louis and Little Rock by a direct line. The road will go through Ravenden Springs and assist in the development of that resort, the Springs being owned by R. D. Welch.

The directors of the railroad company are R. D. Welch and A. N. Wylie, Ravenden Springs; H. F. Sloan and M. H. Long, Imboden; George G. Dent, Annieville, Ark.; Serono Stanley, Koshkonong, Missouri.

Morning Star Railway.

The Morning Star Railway Co., which proposes to build a line from Yellville to Newport, Ark., has obtained an extension of its charter for six months. Joseph N.

Staton of Newport is reported as saying that the company had about completed negotiations to sell its bonds when the depression in the money market came and caused the abandonment of efforts to finance the plan. The directors of the company are Caleb H. Jackson and Geo. H. Heafford, Chicago; Theo. Rockefeller, Streator, Ill.; George W. Chase, S. G. Wilson, N. J. Bearden and Cal. Williams of Rush, Marion county, Arkansas. Mr. Staton also applied for an extension of the charter of the Newport Bridge, Belt & Terminal Co., but action on this was deferred by the board of railway incorporators.

Coalgate to Oklahoma City.

A dispatch from Denison, Texas, reports that the Texas & Oklahoma Railway Co. has completed thirty-four miles of line northwest from Coalgate, I. T., to Ada, and that it has been turned over to the operating department of the Missouri, Kansas & Texas Railway. Track has also been laid northwest of Ada for twelve miles to the Canadian river. This line is going to Oklahoma City, 118 miles from Coalgate, and President F. N. Finney informs the Manufacturers' Record that the line should be completed for a distance of sixty miles out of Coalgate by the end of this month.

Colorado, Oklahoma & Southern.

The Colorado, Oklahoma & Southern Railway Co. has been incorporated at Weatherford, Okla., to build a line about 100 miles long from a connection with the Santa Fe system, in Woodward county, southeast to Weatherford, and running through Day, Dewey, Custer, Comanche, Washita, Caddo and Kiowa counties. The stockholders are: A. D. Cardwell, H. E. Bonebrake, Charles E. Davis of Weatherford, C. H. Dewaide, J. H. Dillon and A. T. Keyser of Guthrie, C. M. Cade of Shawnee, J. M. Morrison of Independence, Okla., and J. M. Cook of Elk City, Oklahoma.

Through Caddo Gap.

The Missouri Pacific Railway Co. is reported to be building a detached piece of line three miles long through Caddo Gap, in the southern part of Montgomery county, Arkansas, to be used as part of the projected extension of the Iron Mountain division from Greenwood to Gurdon. The distance from Greenwood to Gurdon in an air line is about 110 miles, so that considerable construction would have to be done to link up this unconnected bit of road, which it appears is being built in advance to secure the route through the gap.

Nashville & Lewisburg.

The Silver Interurban Railway Co. will, according to a report from Nashville, Tenn., be incorporated by Charles W. Silver of Urbana, Ohio, for the purpose of building the proposed Nashville & Lewisburg Electric Railway. Mr. Silver being the senior member of Silver & Son, who have, it is further stated, contracted to build and equip the road for \$30,000 per mile. Dr. H. J. Reynolds, one of those interested, is reported as saying that the line, after being built to Lewisburg, will be extended to Huntsville, Ala.

Midland Valley.

George W. Donaghey of Conway, Ark., who has the contract for constructing depot buildings and section-houses for the Midland Valley Railroad, is reported as saying that the company has laid about thirty-five miles of track on its line, which is to run from Hartford, Ark., to Bokoshe, I. T., about sixty-five miles. The projectors of the new line own large tracts of coal lands, and it is stated are already

shipping fuel from mines on the completed portion of the road.

Important Official Change.

Press dispatches from Savannah, Ga., announce the resignation of John M. Egan as president of the Central of Georgia Railway Co. and the election of J. F. Hanson of Macon, Ga., to fill the vacancy. Mr. Hanson is also chairman of the board, which latter position he has held for some time. Theodore C. Kline, general superintendent, has been made general manager of the system, a new position, and the general superintendency abolished.

Railroad Notes.

An official circular announces the appointment of T. N. Downing to be superintendent of motive power of the Mobile, Jackson & Kansas City Railroad at Mobile, Ala.

The International & Great Northern Railroad has formally taken over the Houston, Oak Lawn & Magnolia Park Railway, a terminal line at Houston, Texas, which it purchased some time ago.

The appointment of S. T. Fulton as assistant to B. L. Winchell, third vice-president of the Rock Island system and first vice-president of the Frisco system, is announced. His headquarters will be at Chicago.

President Chester H. Pond of the Memphis & Gulf Railroad Co. writes from Memphis, Tenn., to the Manufacturers' Record saying: "We have not purchased the Pensacola, Alabama & Tennessee Railroad. It is uncertain whether we acquire that little property or not."

Mr. R. B. Pregram, president and general manager of the Vera Cruz & Pacific Railway, writes from Orizaba, Vera Cruz, Mexico, to the Manufacturers' Record, saying that the company may build a line four kilometers long around the city of Vera Cruz, giving the road a route of its own to the custom-house and wharves.

The Coal & Coke Railway, according to a dispatch from Charleston, W. Va., has doubled its capital stock, having increased it from \$5,000,000 to \$10,000,000. The extension of the Charleston, Clendennin & Sutton Railroad, which is now part of the Coal & Coke Railway, is being constructed in a very superior manner. Henry G. Davis is president of the company.

President A. H. Flint of the Chesapeake Transit Co., Norfolk, Va., writes the Manufacturers' Record saying: "We anticipate building about five miles only of double track. This will probably be the same construction as we now have, 90-pound rails, 7x9, 8x6 ties, 2640 to the mile, overhead construction with 4-0 trolley." Mr. Flint is of the firm of Flint, Jones & Co., Mills Building, New York city.

A dispatch from Austin, Texas, says that the proposed extension of the Trinity & Brazos Valley Railway to Beaumont would run through the heart of pine timber lands in Eastern Texas owned by the Kirby Lumber Co., in which the Frisco system has a large share, and that T. Jefferson Coolidge, Jr., of Boston, Mass., is financially identified with both roads. Mr. Coolidge is one of the new men in the Seaboard system.

President W. H. Harvey of the Monte Ne Railway writes from Monte Ne, Ark., to the Manufacturers' Record with reference to the report that he may build an extension from Lowell, Ark., to Gentry, twenty or twenty-two miles, saying that he is surveying two routes, one to Gentry and the other to Siloam Springs, but does not know yet that either will be built. Only one route will be selected for construction if any is decided upon.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

Trade With Spain.

Jose Cordina Pons of Barcelona, Spain, writes to the Manufacturers' Record as follows:

"I have attentively observed the increase in your industries, some of the products of which are altogether unknown in Spain. Our merchants have need of an infinity of articles which they must seek in foreign countries. France, Germany, Belgium and England cut a very large figure in exports to Spain of articles which, under good conditions of competitions, are also produced by factories in America. For this reason I address myself to your producers who are in a condition to ship articles which are in great demand in our markets and who desire to be represented in Spain. It is rather a difficult task to introduce into a market with a temper like ours goods from a new source, but faithful and industrious activity in combination with suitable advertising, zeal and personal interest in getting the articles introduced into our markets would soon be followed by results justifying the labor incurred."

Mr. Pons would like to have prospectuses of machinery and other goods.

Eduardo Soriano of Valencia, Spain, who desires to represent American houses in Valencia and other parts of Spain, writes that, though American products are superior to those made in Spain and elsewhere in the world, they ought to be sold at least at the same price, and that if that could be done he could offer with absolute certainty plenty of good business.

Rubber Goods in Austria.

Emil Koenigstein, No. 20 Kaiser Josefstrasse, Vienna, writes to the Manufacturers' Record that he has established himself as an importer of American products only, and is interested especially in rubber boots and shoes, rubber gloves for surgical work, chemical work, photography, motor-car and household rubber finger caps, mail pouches and all specialties of that branch, waterproof garments, cheap, medium and best quality and of latest patterns for men and women, rubber toys and novelties and children's toys. He adds: "The field is open for me and for many articles of American origin. I invite American houses to communicate with me as soon as possible. The most important condition under which only I can buy, if all other conditions are convenient, is that any house wishing to do business with me must do it with me solely for the territory of Austria-Hungary and the Balkan States. Samples should be in my possession not later than the second week in January next."

Wants Large Paper Bags.

G. Gruesemann & Co., 6 Lloyd's avenue, Fenchurch street, London, E. C., write to the Manufacturers' Record as follows: "We have for some time already been trying to find out a competent firm to supply paper bags taking 187, 204 and 224 pounds gross, 12, 11 and 10 bags to the ton of 2240 pounds, which, we understand, are extensively employed in the United States, and we should feel very much obliged if you could bring us in touch with such paper manufacturers producing the thing in question. We are personally acquainted with many of the largest manufacturers on the Continent and in the United Kingdom using jute bags up to now, and we are sure that we can influence an extensive business in case we

find a paper bag answering the purpose. We should be glad to give the necessary details to manufacturers, so that they are in a position to make us an offer and send samples. Thanking you in anticipation for the trouble you are taking in this matter."

Wants Turpentine Oil.

Nicolai Johanssen of Stockholm writes to the Manufacturers' Record that he is interested in gluten feed, corn oil, syrup and turpentine oil and rosin. He would like to have the names of American exporters of the first two articles and of syrup, but he says that he has been compelled to buy turpentine oil and rosin from Hamburg or London. He would like to get into connection with exporters in Savannah or Galveston handling these articles, and is convinced that a direct business would be very remunerative.

Openings in Warsaw.

B. Averarius & Co. of Warsaw, Russian Poland, write to the Manufacturers' Record that never before has there been such an opportunity as now for the introduction of American goods into their market, where, through important social and national causes, German productions are generally avoided. Their house has, therefore, opened a special American department, and will be glad to co-operate with American manufacturers and exporters.

Phosphates in New Zealand.

Wright, Stephenson & Co. of Dunedin, New Zealand, write to the Manufacturers' Record that they do a considerable business in phosphates, their annual requirement being from 2000 to 3000 tons of 80 to 85 per cent. rock, but at present they have an arrangement for an annual supply of the crude rock which they crush themselves at the port of arrival.

For the Iron Trade.

Nienstadt & Co. of Copenhagen write to the Manufacturers' Record that they have as customers shipbuilders, engineers, machine works, iron foundries, coach builders, smiths and makers of agricultural machinery, and that they would like to get into communication with American manufacturers of material for such industries.

Call From Colombia.

Pedro Antonio Torres of Popayan, Cauca, Colombia, writes to the Manufacturers' Record that, desiring to extend his business, which deals with all kinds of textile fabrics, writing material, furniture, glassware, jewelry, etc., he would establish new relations with reputable houses.

Want Sheet-Working Machines.

A. Rusconi & Co., No. 97 Garibaldi avenue, Milan, write to the Manufacturers' Record for information about up-to-date American sheet-working machines, as they propose to install machinery to make galvanized buckets.

Hand Gins for Porto Rico.

Rafael R. Palacios, Box 422, Salazar, Porto Rico, informs the Manufacturers' Record that Porto Rico needs hand cotton gins, so that each grower may have one for his own use.

Morehead Cotton Mills, Spray, N. C., is installing 120 looms. This company was reported in August as to double its 4000 spindles for the production of fine yarns, and these improvements have been completed.

The profits of the State penitentiary of North Carolina during the past year amounted to \$100,000.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Wampum Cotton Mills.

At Lincolnton, N. C., the finishing touches are now being given to a textile enterprise that is of importance in connection with fine-yarn manufacture. The enterprise in the Wampum Cotton Mills, which incorporated several months ago with \$160,000 capital, and details of which were presented briefly by the Manufacturers' Record last February. Nearly all the machinery is in position, and by the end of December the plant will be ready for operation. There are 10,000 spinning spindles, as previously stated; also 5000 twister spindles, combers, cards, spinning frames, etc., to match, for manufacturing fine yarns, Nos. 40 to 80, from long-staple cotton, both peeler and Egyptian. A 400-horse-power steam plant will supply power and heat, also drive generators for electric lighting. J. A. Abernethy, one of the first cotton manufacturers in the South to undertake the production of fine yarns, established this enterprise. He formerly owned a large yarn plant, which he sold about a year ago.

Seeking Cotton-Mill Location.

Believing it probable that European cotton manufacturers will soon be giving thought to the establishment of mills in the United States, a well-known New York business firm interested in manufacturing properties both here and abroad interviewed a number of them on the subject. It was found that the foreign mill men will eventually buy or build mills in this country, and one firm, said to be of the best reputation in English textile circles, is at the present time prepared to investigate a suitable location for a mill. The firm mentioned is desirous of obtaining a factory or site for cotton spinning, and because of the generally recognized advantages of the South in this direction, will give careful attention to propositions from that section. Letters on the subject should be addressed to Messrs. Nicholson & Co., 150 Broadway, New York, that being the firm in communication with the European manufacturers contemplating the mill.

The Cotton Movement.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during the first three months of the present season was 4,991,983 bales, a decrease under the same period last year of 67,709 bales; the exports were 2,664,749 bales, an increase of 254,069 bales; takings by Northern spinners 576,082 bales, a decrease of 86,982; by Southern spinners 605,950 bales, a decrease of 5812 bales. The movement of the first four days of December added brings the amount of cotton brought into sight during ninety-five days of the season to 5,280,750 bales, a decrease of 62,360 bales; exports 2,858,479 bales, an increase of 278,193 bales; takings by Northern spinners 624,596, a decrease of 84,445 bales, and by Southern spinners 640,950 bales, a decrease of 8384 bales.

For a \$150,000 Silk Mill.

Arrangements are now in progress for the establishment of a silk mill, capital-

ized at \$150,000, at Grafton, W. Va. John W. Dawson, president of a company operating silk mills at Reynoldsville, Pa., makes the proposition through his representative, Thomas Haggerty, who has been in Grafton during the past week submitting the offer. It is proposed to organize the West Virginia Silk Manufacturing Co., to own and operate the plant. Grafton investors are required to take \$50,000 of the stock, and leading business men of the city are interesting themselves in the enterprise.

Textile Notes.

Reports state that a \$60,000 knitting plant will be established in Enterprise, Ala.

Melrose Knitting Mill Co., Raleigh, N. C., has begun the erection of a dye plant to cost about \$1000.

A movement is on foot for the erection of a cotton mill at Pratt City, Ala., and the leading business men are interested.

It is probable that a knitting mill will be established at Spray, N. C., and it is said that the Spray Mercantile Co. is interested.

It is reported that the Cliffside (N. C.) Mills will enlarge its plant of 10,000 spindles and 610 looms, the work of construction to begin next spring.

It is reported that Messrs. J. E. Dunn of St. Louis, Mo., and L. Howard Lee of Texas will arrange for the establishment of a cotton mill at Romulus, O. T.

Alcorn Woolen Manufacturing Co., Corinth, Miss., will increase its capital stock from \$50,000 to \$100,000 and enlarge its cassimere mill. There are twenty-four looms, 200 sewing machines, etc., in the equipment at present.

The stockholders of the Royal Bag & Yarn Manufacturing Co. of Charleston, S. C., met last week and authorized an increase in capital stock from \$325,000 to \$475,000. This \$150,000 will be 7 per cent. preferred stock. The company's intention to take this action was reported in the Manufacturers' Record last month in connection with details regarding the doubling of the 5000-spindle and 200-loom mill at a cost of \$70,000.

The Standard Pressed Cloth Co. of Marietta, Ga., has been incorporated, with capital stock of \$10,000, and privilege of increasing to \$100,000. It will establish a plant for manufacturing pressed cloth such as is used by oil mills. M. M. Sessions has been elected president and treasurer; E. J. Powers, vice-president; Thomas Kenan, secretary, and A. F. Parker, superintendent. Mr. Parker is now in the East arranging contracts for the necessary machinery, and expects to have the equipment installed and in operation by the end of January.

QUOTATIONS OF COTTON YARNS.

By Buckingham, Paulson & Co., New York, Philadelphia and Chicago, December 8.

No. 10s-1 and 12s-1 warps.....	19 @20
No. 14s-1 warps.....	21 @
No. 16s-1 warps.....	20 1/2 @
No. 20s-1 warps.....	22 @
No. 6s to 10s yarn.....	18 @
No. 12s-1.....	18 1/2 @
No. 14s-1.....	20 @
No. 16s-1.....	20 1/2 @
No. 20s-1.....	21 @
No. 22s-1.....	22 @
No. 8s-2 ply soft yarn.....	18 1/2 @19
No. 10s-2 ply soft yarn.....	19 1/2 @
No. 8s-2 ply hard.....	18 @18 1/2
No. 10s-2 ply hard.....	18 1/2 @
No. 12s-2 ply hard.....	19 @19 1/2
No. 14s-2 ply.....	21 @
No. 16s-2 ply.....	21 @21 1/2
No. 20s-2 ply.....	22 @
No. 24s-2 ply.....	24 @
No. 26s-2 ply.....	24 1/2 @
No. 30s-2 ply yarn.....	26 @
No. 40s-2 ply.....	29 @29 1/2
No. 8s-3, 4 and 5 ply.....	18 @18 1/2
No. 20s-2 ply chain warps.....	23 @
No. 24s-2 ply chain warps.....	24 1/2 @
No. 26s-2 ply chain warps.....	25 @
No. 30s-2 ply chain warps.....	26 @26 1/2
No. 16s-3 ply hard twist.....	21 @21 1/2
No. 20s-3 ply hard twist.....	22 @
No. 26s-3 ply hard twist.....	24 1/2 @

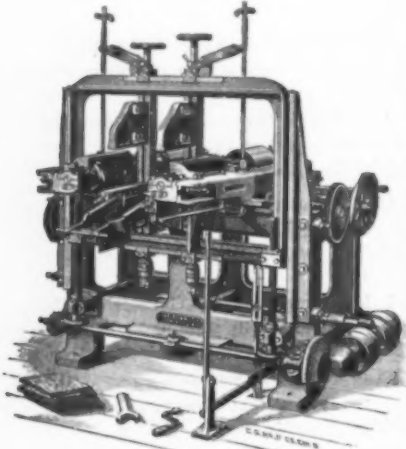
MECHANICAL.

Lock-Corner Box Machine.

An accompanying illustration presents a new and improved machine especially designed for those making boxes and who make them in large quantities.

Attention is invited to some of its improved features as given by the manufacturer:

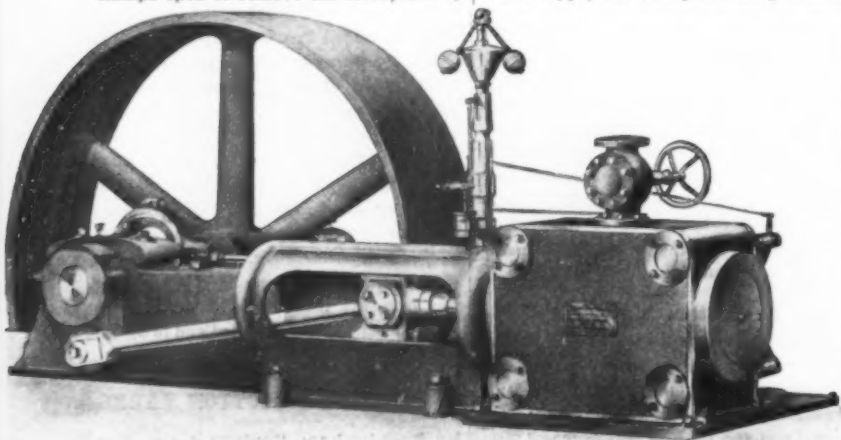
1. It will work from four to eighteen inches in length and any width to twelve inches. Several pieces, one above the other to fourteen inches thick, can be cut at one operation. Hard or soft wood can be worked with equal facility.



LOCK-CORNER BOX MACHINE.

2. Simplicity and rapidity is the rule with this machine, and the work is done perfectly in every detail, inasmuch as both ends are worked together, insuring absolute accuracy.

3. Clamps carrying the boards are on a frame easily raised and lowered automatically. The jaws for clamping the material are adjustable by hand-wheels for taking the thicknesses desired, and levers convenient to operator stack the pieces and clamp them firmly together till the upward movement commences, when they are gripped by the automatic clamps. As soon as saws have passed over work the clamps open to remove the stock, and by



A NEW CORLISS ENGINE.

aid of lever the return of the frame is made rapidly.

All adjustments are made quickly, easily and with little labor. A size is made larger than this, and three speeds of feed are furnished.

The machine is built by J. A. Fay & Egan Company, Cincinnati, Ohio.

A New Corliss Engine.

Steam engines of the Corliss type have for many years been serving users of power. They have been designed and built for use in factories, power-houses and other industrial establishments, and can be seen in representative plants

throughout the world. The field of Corliss-engine design has been so fully worked over and the accepted design has become so simple that no strikingly novel designs are to be expected. However, there is now being introduced a new Corliss engine which represents the experience of twenty-six years and combines all the desirable elements of such a machine. This new engine is strong, simple and compact, nothing contributing to economy or durability having been omitted, and nothing has been added for ornamentation. It will doubtless find a large sale among power-users who appreciate quality. The engine is built by the Allis-Chalmers Co. of Chicago from the designs of Irving H. Reynolds. An accompanying illustration shows the machine, which is built in seven sizes, ranging from 50 to 500 horse-power, designed for steam pressures up to 150 pounds. These types are of somewhat shorter strokes than have heretofore been customary in Corliss engines, with the idea of economizing in space and making the construction more rigid. The speeds are also somewhat higher than usual, ranging from 110 to 150 revolutions per minute, although these speeds are not higher than those at which the Reynolds-Corliss engines of older design are frequently operated.

The frame is cast in one piece with the slide, the construction being of the box type, resting on the foundation for its entire length. The main bearing shells are bored into the frame, thus insuring a solid bearing, and also permitting the easy removal of the shells by rolling them out around the shaft.

The slide is of the barrel type, with babbitt-faced shoes, with wedge adjustment. The piston rod is screwed into the crosshead and held firmly with a steel lock-nut. The cylinder is of the round-cornered type, is fitted with double-ported steam and exhaust valves, lagged with planished steel. The cylinder is set on a cast-iron baseplate, which extends under the valve gear, serving as a drip pan.

The valve gear is of the usual Reynolds-Corliss type, the wristplate being of skel-

The crank is of plain type, polished on the face, and is protected by a planished steel oil guard (not shown in illustration).

The engines are fitted either with belt fly-wheels, as shown, or with square-rim wheels where used with direct-connected electric generators. The crank and cross-head pins and main journals are of a size ordinarily used with heavy-duty engines.

New Strainer and Foot Valve.

The strainer and foot valve illustrated herewith is an entirely new departure.



FIG. 1.



FIG. 2.

Its manufacturer claims it to be the only one in which the entire strainer can be quickly raised from its position at the lower end of its suction pipe, cleaned and lowered into position again without disconnecting anything whatever, without the use of wrenches or tools of any kind or raising the suction pipe out of the water. This enables the operator to keep the strainer clean and insures a full, clear opening for the flow of water into the

The points of advantage claimed for this foot valve and strainer are as follows: Generous areas, direct passages, less obstructions than other valves, strength, workmanship, durability, takes water from the bottom, thereby enabling the operator to practically drain a pit or pump basin; large capacity of strainer, low velocity of water through the strainer, it being less than through the suction pipe; a low lift of the valve gate in the inter-

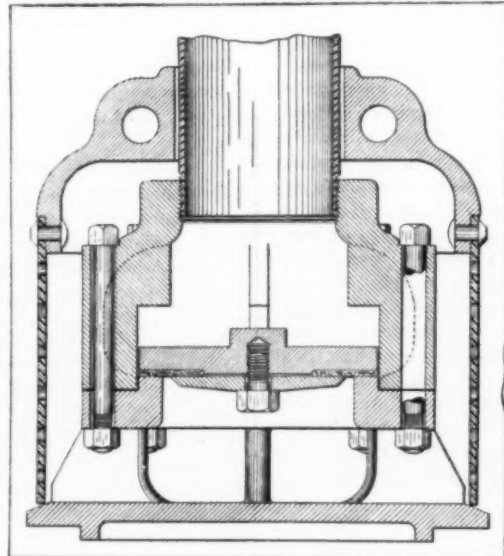


FIG. 3.

suction pipe at all times without delay or vexation.

The strainer is made of heavy perforated metal riveted to a substantial top casting which slides loosely on the suction pipe, the said pipe acting as a guide when raising and lowering. The area of the opening in the strainer is many times the sectional area of the pipe upon which it is used, depending on the size thereof. The simplicity, efficiency and entire freedom from complication will doubtless induce the user of foot valves and strainers to investigate the many advantages of this new device.

changeable parts, and a prevention of loss by shutdowns.

The entire appliance is made extra heavy and strong, and should meet with the approval of all pump-users. It is manufactured by the Emerson Steam Pump Co., 1410 G street N. W., Washington, D. C., with factory at Alexandria, Va.

The strainer is also made without the foot valve when desired.

The Globe Manifold.

In almost every department of modern business life there have been introduced ideas and devices for saving time and pro-

moting accuracy, and new ones are being offered every day. During the ten years just passed there has been especially noticeable the improvements in office and store supplies for all kinds of industries. Manifolders are particularly useful. An accompanying illustration shows the Globe Manifolder, manufactured by the Globe Register Co. of Cincinnati, Ohio. The device has many exclusive features. It manifolds immediately at one writing in duplicate, triplicate or quadruplicate, any uniform length of bill desired being used, the stroke on register being arranged accordingly. There are no carbons to handle; the copies are clear, and the utility of the manifolder is evident. A

ordinary power purposes the hoisting mechanism can be thrown out of gear and allowed to stand idle. The gasoline tank is in base of engine, as are also the batteries, but these can be placed elsewhere if desired. A number of these engines are being used in the East for hauling fish nets, oyster pots and many other purposes. They have also been found very convenient in railroad yards and for contractors' work. The Columbus Machine Co. of Columbus, Ohio, builds the machine.

Wagner Cold-Saw Cutting-Off Machines.

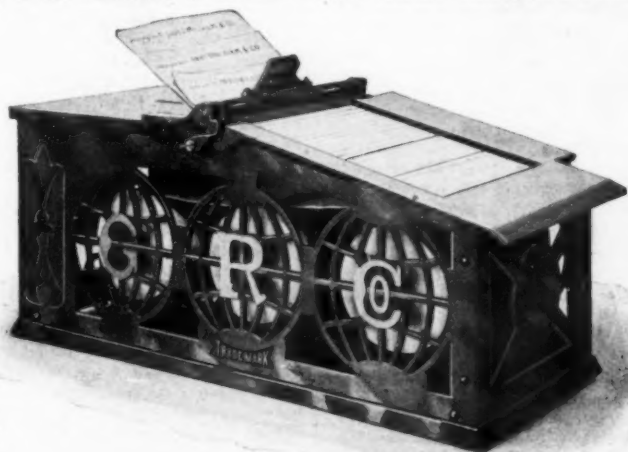
Accompanying illustrations show Wagner cold-saw cutting-off machines. The

arrangement makes a very sensitive feed. It is easily regulated by shifting the weight, and when the saw becomes dull and does not cut freely, or the cross-section increases, the weighted arm lifts, releases the feed and prevents the saw breaking or becoming jammed.

A pan is formed in the table for soap

when it is desired to cut off both ends.

Another machine is designed for cutting off risers and sink-heads from steel castings. In this machine the table is adjustable vertically, and by setting the swivel-head so that the saw arbor stands vertically the difficulty heretofore experienced in setting the casting is overcome, as the



THE GLOBE MANIFOLDER.

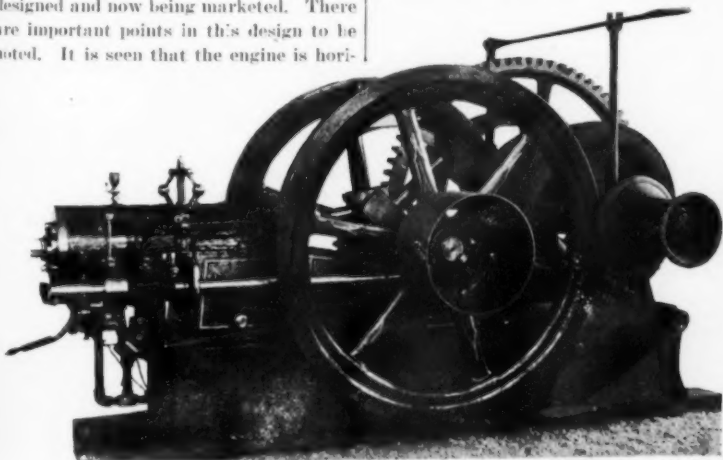
detailed statement of the machine's capabilities will interest every business man. Write the company.

A New Hoisting Engine.

Users of hoisting equipments are steadily demanding improvements in the machinery they require. During the past several years there has been a tendency to use gasoline-driven hoisting engines, pumping engines, air compressors and other machines. Because of this demand there is presented the accompanying illustration of a new hoisting engine recently designed and now being marketed. There are important points in this design to be noted. It is seen that the engine is hori-

Diamond Drill & Machine Co., Birdsboro, Pa., has secured the right to manufacture these machines in this country from designs furnished by the patentee.

The machine next to the smallest size carries a blade twelve inches in diameter. The saw is mounted in an arbor that is carried in a swivel-head secured to the front of the ram. This ram is square in section and travels in a long, rigid guide. The head is graduated and can be swung clear around in a vertical plane and clamped in any position, thus making it possible to cut off the stock at any de-



A NEW HOISTING ENGINE.

zontal, of "Columbus" standard pattern, such as is used for portable service. The hoist drum is geared direct to the main shaft of the engine, one reduction of gears, the latter being cut so that they run noiselessly. The drum can be made various sizes to suit requirements, and is controlled by friction clutch and brake. In raising the load the clutch is thrown in. The load is lowered by gravity, being controlled by the brake. The engine can be varied in speed while in operation. Clutch, brake and engine are all operated from one position. It will be noted that the nigger-head is placed on the drum-shaft and that a plain pulley is placed on the engine. Should the engine be required for

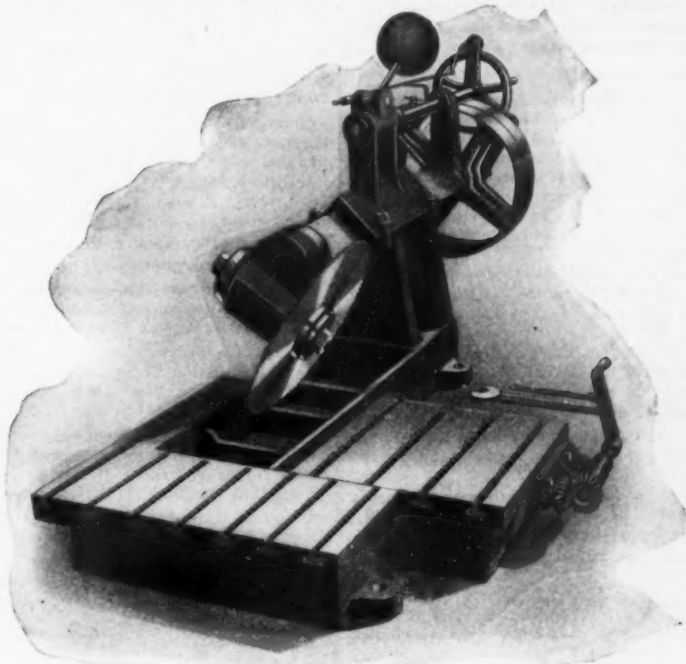
sired angle. The arbor is driven by means of a phosphor-bronze wormwheel and steel worm, the wormshaft running longitudinally through the ram and carrying on its end tight and loose driving pulleys, thus requiring no countershaft.

The feed is positive, and is obtained by means of an eccentric on the end of the wormshaft. The feed screw is journaled in a bracket at the end of the ram and runs through a nut which fits freely in a bracket cast on the top of the ram guide. The screw is rotated by a ratchet-wheel and pawl. A rack is formed at the top of the feed nut, and meshing with this rack is a pinion to which is attached an arm carrying an adjustable weight. This

with each style of saw blade. A special study has been made of designing different styles to meet the varying requirements to which this unique cold-saw cutting machine can be put. The machine for cutting long I-beams, channels or heavy shafts is so designed that it is not necessary to turn the work around

teeth broken out, etc. It is automatically thrown out of feed when the cut is completed, thus allowing one operator to have charge of several machines.

The saw blade dips constantly in bath of lubricant. The Diamond Company also makes steel castings and the Jackson belt-lacing machine.



STEEL FOUNDRY COLD-SAW.

water or other lubricant, in which the saw constantly dips. The 12-inch saw will cut rounds up to three and one-half inches in diameter; the largest machine, carrying a 40-inch blade, will cut rounds up to thirteen inches in diameter.

These machines are built with seven sizes of saw blades and as many as four different styles of bedplates and vises

casting can be set naturally or in the position in which it was cast with the sink-head vertical.

Some of the advantages claimed for this machine are: Great capacity for speed; minimum wear of saw blade; automatic feed, according to variation in shape or hardness of material to be cut; no cessation in cutting, even in case of saws with



12-INCH COLD-SAW CUTTING-OFF MACHINE.

CONSTRUCTION DEPARTMENT.

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The Manufacturers' Record seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

ALABAMA.

Birmingham—Mining.—Eunawhee Mining Co. will hold meeting December 26 to consider issue of \$50,000 of bonds for improvements to its property.

Birmingham—Boiler Works.—Birmingham Boiler Works has commenced erection of its new plant, which will cost \$100,000, including the modern and up-to-date machinery.

Birmingham—Brewery.—It is reported that L. L. Reading and F. W. Howell, representing the Brinkle & Reading Co. of Dayton, Ohio, are investigating with view to establishing \$65,000 brewery in Birmingham.

Gadsden—Wagon Factory.—Etowah Manufacturing Co. has been incorporated, with capital of \$80,000, by Samuel Rogers of Gadsden, Edwin D. Daley and Chas. S. Daley of New York for the manufacture of wagons, wheels and shovels, and has acquired the property, consisting of twenty acres of land, buildings, saw-mill, dryhouse and complete equipment of machinery, erected some time ago for the Mecklin Manufacturing Co., which has suspended operations.

Jasper—Water-works Improvement.—It is reported that city will install additional fire district pump of 750,000 gallons capacity; also three miles of water mains and thirty-four hydrants; estimated cost \$15,000. P. Byrne of Birmingham, Ala., is designing engineer.

Mobile—Printing.—Unionist Printing Co. has been organized, with W. D. Taylor, president; Joseph Costa, vice-president, and L. D. Browne, secretary.

Tuscaloosa—Brick Works.—Tuscaloosa Brick Co. has been incorporated and commenced work on erection of its proposed brick plant. J. R. Stallworth is president; D. R. C. Clayton, vice-president and general manager; H. N. Mitchell, secretary-treasurer.

Walker County—Coal and Iron Lands.—W. H. Jordan of Corinth, Miss., has purchased 25,000 acres of coal and iron lands in Walker county.

ARKANSAS.

Arkansas City—Hoop Factory.—Crittenden & Buchanan are erecting hoop factory with capacity of 60,000 hoops per day at cost of \$12,000.

Clarendon—Oar Factory.—T. T. Bateman has purchased and will operate the oar factory of the A. H. Wells Company.

Clarendon—Ice Plant.—T. J. Carter of Trenton, Tenn., will erect ice plant to be operated in connection with Clarendon Electric Light & Ice Co.

Desha County—Timber-land Development.—Standard Tie Co. of Detroit, Mich., has purchased and will develop 24,800 acres of timber land in Desha county.

Fort Smith—Fruit Farm.—Sunny Side Fruit Farm Co. has been incorporated, with capital of \$25,000, by J. W. Van Cleave and others.

Greenwood—Coal Company.—Gunther Coal Co., with capital of \$25,000, has been incorporated by Andrew P. Gunther, Thomas J. Hughes and others.

Malvern—Telephone System.—Malvern City Telephone Co. has been incorporated, with capital of \$8000, by W. H. Cooper, Louis Myers, H. A. Butler, T. P. Frisby and others.

Portland—Mercantile.—Chartered: A. W. Cammock Co., with capital of \$15,000, by A. W. Cammock and others.

Prairie Grove—Cannery.—C. J. French of Indiana will, it is reported, establish \$20,000 cannery at Prairie Grove.

Siloam Springs—Water-works.—The Water Company of Siloam Springs has been incorporated, with capital of \$50,000, for constructing system of water-works. E. L. Martin of Kansas City, Mo., is president; R. J. Holmes of Kansas City, first vice-president; J. B. McDonough of Fort Smith, Ark., second vice-president, and John B. Day of Kansas City, secretary-treasurer.

FLORIDA.

Fernandina—Lumber Mill.—McNair Lumber Mills, owned by McNair & Son and reported lately as burned, will be rebuilt at once.

Herndon—Turpentine Lands.—Brown & Parish of Brooksville have purchased large tract of timber land near Herndon which they will utilize as turpentine farm.

Jacksonville—Lumber Mills.—J. P. Lynch has become associated with the West-Edenfield Company, which company will change its name to the West-Lynch Company and install additional machinery for increasing capacity of its lumber mills.

Jacksonville—Lumber Mills.—J. F. Ellenberg of Philadelphia, Pa., and J. B. Prevatt of Jacksonville, both of the O. K. Yellow Pine Lumber Co., have completed arrangements, and work has been commenced on erection of lumber plant with capacity for handling 1,000,000 feet a month.

Tampa—Planing Mill.—Hillsborough Lumber Co. will install planing mill.

Tampa—Planing Mill and Novelty Works.—Morse & Walker will establish planing mill and novelty works.

Tampa—Planing Mill.—Edenfield Building & Manufacturing Co. will erect planing mill and novelty works.

Tampa—Cigar Factory.—A. Santaela will erect new brick cigar factory in West Tampa.

Tampa—Brewery.—Florida Brewing Co., reported recently to increase capacity of its plant, is adding 40-ton ice plant to its present equipment.*

GEORGIA.

Americus—Packing and Cold-storage Plant.—C. J. Sherlock, A. Block, N. M. Block and others have incorporated Sherlock & Co., with capital of \$10,000, for conducting packing-house and cold-storage plant.

Brunswick—Ice Plant.—Glynn Ice Co. will increase capacity from fifteen to twenty-five tons per day.

Cartersville—Ice Plant.—Gilreath Company, reported recently to build ice plant, has been incorporated, with capital of \$20,000, by Paul Gilreath, Thomas M. Gilreath, Jas. H. Wofford and others.

Columbus—Light and Power Company.—Columbus Light & Power Co., capitalized at \$72,000, a consolidation of the Columbus Gas Co. and Columbus Electric Light Co., is rebuilding the gas works and erecting new and modern electric-light plant. Walter Weaver is president of the new company; W. H. Lee, vice-president, and John E. Davis, secretary.

Dublin—Fertilizer Factory.—Middle Geo-

gia Fertilizer Co. has been organized for manufacture of fertilizers by J. E. Smith, Jr., A. W. Garret and others.

Dublin—Cooperage.—Dublin Stave Co. will install machinery for manufacture of slack-barrel stock and tight-barrel staves.

Marietta—Box-board Plant.—Marietta Paper Mill will install machinery for manufacture of box board for use in making paper boxes.

Marietta—Pressed-cloth Mill.—Standard Pressed Cloth Co. has been incorporated, with capital stock of \$10,000, to establish plant for manufacturing pressed cloth for oil mills; M. M. Sessions, president; Thomas Kennan, secretary, and A. F. Parker, superintendent.

Milledgeville—Water-power Development.—Oconee Electric Light & Power Co. has amended its charter, increasing capital stock of \$50,000 to \$650,000, and will develop water-power of Oconee river to furnish electricity and power for lighting and manufacturing purposes.

Nocatee—Planing Mill.—W. G. Welles will rebuild planing mill recently burned.

Savannah—Lumber Mills.—Rodman Lumber Co., for manufacture of lumber, etc., has been chartered, with capital of \$50,000, by Lawrence McNeil, John J. Cummings, Duncan C. Wilson and others.

Savannah—Lumber Mills.—Savannah Lumber Co. has been incorporated, with capital of \$50,000, for manufacture of lumber, by Lawrence McNeil, John J. Cummings, Duncan C. Wilson and others.

Savannah—Real Estate.—Chartered: Empire Investment Co. by John Schwarz, John F. Tietjen, Edward J. Kennedy and others.

Thunderbolt—Ice Plant.—Warsaw Ice & Light Co. will install 10-ton freezing tank for enlarging ice factory.

Waycross—Crate and Box Factory.—Waycross Manufacturing Co. has been organized with capital of \$10,000, and will erect factory for manufacture of boxes, crates, sash, doors, blinds, etc. L. Johnson is president, and F. M. Hawkins, general manager.

KENTUCKY.

Altamont—Coal Mines.—New Altamont Coal Co. has been incorporated, with capital of \$6000, by J. C. Pritchard, M. E. and S. W. Almy and others.

Beattyville—Coal Mines.—Richardson Coal Co. has been incorporated, with capital of \$10,000.

Bowling Green—Tobacco Factories.—Bowling Green Tobacco Co. has consolidated with the T. M. Ryan Tobacco Co. of Martin, Tenn., and the Hampton Tobacco Co. of Newburg, Ind. The combined interests will be known as the Ryan-Hampton Tobacco Co., with capital of \$10,000. Plants will be operated with increased capacity.

Carter—Fire-brick Works.—West Virginia & Kentucky Fire-Brick Co. has been incorporated, with capital of \$25,000, by L. S. Vincent and M. F. Christian of Carter and O. E. Burns of Huntington, W. Va.

Cattlettsburg—Coal Mines.—Tennis Coal Co. has increased capital from \$50,000 to \$250,000.

Henderson—Car Works.—R. H. Mehard and associates of Cincinnati, Ohio, reported recently as having made a proposition for organization of company to establish car works at Henderson, have formed the Henderson Car Works Co., with capitalization of \$1,000,000 and James E. Rankin, president; James R. Barrett, vice-president; B. G. Witt, treasurer; R. H. Mehard of Cincinnati, Ohio, secretary, and A. L. Jacobs of Cincinnati, general manager.

Lexington—Stave and Stone Company.—Chartered: Southern Stave & Stone Co., with capital of \$100,000.

Lexington—Stave and Lumber Mills.—Southern Stave & Tie Co. has been incorporated, with capital stock of \$100,000, as recently reported, for establishment of mill at Sandersville. Address C. H. Stoll, vice-president and general manager.*

Louisville—Oil Company.—Louisville Oil Co. has been incorporated, with capital of \$1500, by T. L. Block, J. W. Miller and M. O. Curd.

Louisville—Mantel Factory.—Hegan Mantel Co. (established) has been incorporated, with capital of \$250,000, by E. C. Hegan, E. K. Miller, William Patterson and others.

Louisville—Packing Plant and Stockyards.—Samuel W. Allerton of Chicago, Ill., who

was reported some time ago as having purchased control of the Central Stockyards Co. and to expend \$500,000 in enlarging the establishment and adding an extensive plant for packing pork and other meat, has, with others, incorporated the Kentucky Packing & Provision Co. with capital stock of \$250,000. J. T. Healy of Chicago will be president; L. M. Rice of Louisville, vice-president; John Moran of Chicago, superintendent. Among others interested are Ira F. Brainard of Pittsburg, Pa.; Frank Bray of Louisville, J. M. Waite of Liverpool, England, and others.

Louisville—Mercantile.—Chartered: C. E. Bartoo Co., with capital of \$4400, by C. E. Bartoo, C. A. Huhn and others.

Louisville—Towing.—Mason Towing Co. has been incorporated, with capital of \$500, by John A. Miller, E. M. Mason and Joseph Simpson of Madison, Ind.

Mt. Vernon.—Chartered: Rockcastle Lake Co., for dealing in real estate, with capital of \$5000.

Point Pleasant—Telephone System.—John J. Rusker is organizing company for construction of telephone system.

Russellville—Laundry.—Morton Barclay has awarded contract to Warden Bros. for erection of steam laundry. Building will be 50x100 feet; capital to be invested \$5000; will operate as the Russellville Steam Laundry.

Sturgis—Fluor-spar Mine.—Keystone Mineral & Mining Co., previously reported, is developing fluor-spar mine, certain percentage of which contains lead, and will install complete equipment of machinery for developments of extensive character; Jas. D. Hopewell, president.*

Wayne County—Timber-land Development.—H. W. Forde & Co., Nashville, Tenn., have closed deal with National Lumber Manufacturing Co., Ashland Block, Chicago, Ill., for 3000 poplar trees in Wayne county, Kentucky.

LOUISIANA.

Alexandria—Publishing.—Company has been organized, with capital of \$5000, and J. M. Nugent, president; H. G. Goodwyn, vice-president; J. J. Oglin, secretary, for publication of newspaper.

Baldwin—Saw-mill.—Baldwin Saw-Mill Co., Limited, has been chartered, with capital of \$50,000, and R. S. Barnett, president; H. A. Brown, vice-president, and Geo. M. Lester, secretary-treasurer.

De Ridder—Ice, Light and Water Company.—De Ridder Ice, Light & Water Co. has been incorporated, with capital of \$50,000, for supplying ice, electric lights and water to the town. W. O. Price is president; J. T. Nichols, secretary, and A. B. Pye, treasurer.

Mansfield—Coal Mines.—Louisiana Coal & Lumber Co., Limited, has been incorporated, with capital stock of \$600,000, for development of coal mines in De Soto parish. J. M. Nabors is president; L. W. Bryan, vice-president; S. G. Sample, secretary-treasurer.

Morgan City—Ice Plant.—John Dalton will increase capacity of his ice plant, as lately reported; will install 30-ton ice machine; capital to be invested \$25,000.

MARYLAND.

Baltimore—Mantel Factory.—Broadbent & Davis, mantel manufacturers, have purchased additional property and will erect \$100,000 factory, for which plans were previously reported as having been prepared. Other improvements will be made. Estimates will be taken about January 1.

Baltimore—Addressing Machines.—Automatic Addressing Co., with capital stock of \$750,000, has been incorporated for manufacturing machines to address envelopes and other mailing matter. Olin Bryan, Joseph P. Bryan, Harry C. Sinclair, Charles F. Brown and others are incorporators.

Baltimore—Construction.—W. T. Manning Co. has been incorporated under Delaware laws, with capital of \$100,000, by W. T. Manning, Stewart S. Janney, Findlay H. B. Bullock and others for conducting general contracting and construction business.

Baltimore—Dredging.—Wilmington Dredging Co. has been incorporated under Delaware laws, with capital of \$50,000, by Frank A. Furst, Fred W. Feldner of Baltimore, Thomas H. Savory of Wilmington, Del., and others.

Baltimore—Milk Company.—Baltimore Milk Co. has been incorporated, with capital of \$10,000, by William A. Spurrier, Giles Pruett, Theodore Thomas and others.

Baltimore—Fertilizer Factory.—Woodridge Orchilla Co. has been incorporated under Delaware laws, with capital of \$125,000, for manufacture of fertilizers, chemicals, etc., by Robert A. Woodridge, Wm. M. Anderson, Frank W. Rhoades and others.

Baltimore—Gas Plant.—Capitalists contemplate the organization of a corporation to build a gas plant, lay mains and otherwise provide facilities for supplying gas for illuminating, heating and other purposes in the city of Baltimore. They have had the enterprise in contemplation for some months, and an option on a suitable site has been secured. A leading gas-plant engineer has prepared estimates on the cost of the entire plant and system, both water and coal gas being considered, and a minimum output of 2,000,000 feet annually is proposed. Certain legislative action would be required before the construction of such a plant could be undertaken, and the projectors have engaged Olin Bryan of 701 Union Trust Building, Baltimore, to represent their interests before the legislature. Mr. Bryan is not at liberty to state the names of his principals. However, local rumors say that J. Edw. Addicks of Wilmington, Del., and David M. Newbold of Baltimore are largely interested.

Baltimore—Shirt Factory.—Chartered: Westcott Shirt Co., with capital of \$10,000, by Benjamin F. Westcott, John K. Lemmert, Hiram O. Williams and others.

Baltimore—Towage and Lighterage Company.—Chartered: Baltimore Towage & Lighterage Co. has been incorporated, with capital of \$1000, by James Fluegel, Chas. P. Huntington, Walter Robinson and others.

Ellicott City—Water-works.—City is considering issue of bonds for construction of system of water-works and other improvements; Owen H. Mercier, mayor.

Salisbury—Electric-light Plant.—Company is being organized by James E. Ellwood, M. V. Brewington, W. P. Jackson and others for erection of new electric plant for lighting the city.

Washington, D. C.—Burglar-alarm System.—American Burglar Alarm Messenger Co. has been incorporated, with capital of \$100,000, for purpose of operating a burglar-alarm system, by Robert G. Callum, James S. Addison, Walter V. R. Berry and others.

MISSISSIPPI.

Brookhaven—Ice Plant.—Brookhaven Ice Manufacturing Co. will increase capacity of its ice plant.

Clinton—Electric Plant and Water-works.—City will vote on issue of \$10,000 of bonds for electric-light plant and water-works. Address The Mayor.

Corinth—Woolen Mill.—Alcorn Woolen Manufacturing Co. will increase capital stock from \$50,000 to \$100,000 and enlarge mill.

Crystal Springs—Educational.—Chartered: Mississippi Industrial High School, with capital of \$5000, by A. M. Trotter, S. D. Minor and others.

Louisville—Telephone System.—Central Mississippi Telephone Co. has been incorporated, with capital of \$10,000, and privilege of increasing to \$30,000, by M. H. Woodward, W. C. Hight, A. L. Jagoe and others.

Mound Bayou—Timberland Development.—W. W. Wagner and C. E. Bruce of Brownsville, Tenn., have purchased and will develop timber interests at Mound Bayou.

Yazoo City—Veneer Works.—It is reported that the Indiana Veneer Works of Indianapolis, Ind., will be removed to the South, and is investigating Yazoo City as location.

Waynesboro—Mercantile.—Mississippi Mercantile Co. has been incorporated, with capital of \$10,000, by J. W. McKay, J. T. McKee and J. A. Smith.

MISSOURI.

Belleville—Electric-light Plant.—Installation of municipal electric-light plant is contemplated; F. J. Kern, mayor.

Belleville—Mercantile.—Chartered: Schowengerdt Cash Store, with capital of \$5000, by Geo. H. Schowengerdt and others.

De Soto—Water-works.—E. Guy Helm of East St. Louis, Ill., is preparing plans and estimates for water-works system at De Soto; cost about \$75,000. Address for particulars The Mayor.

Joplin—Real Estate.—Southwestern Real Estate Co. has been incorporated, with capital of \$5000, by E. O. Bartlett, O. H. Pilcher, H. C. Murphy and others.

Kansas City—Collar Factory.—F. A. Case of Detroit, Mich., vice-president of the Norris Company, manufacturer of collars and cuffs, is reported as investigating Kansas City as site for erection of factory.

Kansas City—Brick Works.—Versailles Fire Brick & Clay Manufacturing Co. has been

incorporated, with capital stock of \$60,000, by John B. Barnett, David A. Murphy and Henry B. Harmon.

Kansas City—Building-material Factory.—United States Building Material & Manufacturing Co. has been incorporated, with capital of \$200,000, by H. H. Beals, W. W. Rose, M. F. Erbs and others.

Kansas City—Real Estate.—Chartered: Scarritt Estate Co., with capital stock of \$700,000, by Edward L. Scarritt and others.

Kansas City—Iron Company.—White River Iron Co. has been incorporated, with capital of \$45,000, by F. E. Wear, A. L. Murphey, Russell M. Smith and others.

Kansas City—Real Estate.—Fairmount Land Co., with capitalization of \$50,000, has been incorporated by John A. Kerr, William Majors and others.

Kansas City—Chemical Company.—Chartered: M. Calman Chemical Co., with capital stock of \$250,000, by M. C. Reefer, L. A. Mackintosh and others.

Macon—Coal Company.—Macon Coal Co. has been incorporated, with capital of \$48,000, by R. G. Rombauer, E. McKie and J. P. Moore.

Springfield—Real Estate.—Branson Town Co. has been incorporated, with capital of \$25,000, by B. F. Hobart, R. E. Lee, C. R. Fulbright and others.

St. Louis—Tea and Coffee Company.—Chartered: National Tea & Coffee Co., with capital of \$6000, by Samuel Forwell, Hugh M. Barlow, Chas. F. Miller and others. Address 2099 South Broadway.

St. Louis—Real Estate.—Jeanette Real Estate Co. has been incorporated, with capital of \$5000, by M. E. Gilliland and others.

St. Louis—Hotel Company.—Chartered: Fraternal Home Hotel Co., with capital of \$15,000, by J. O. Breech, F. W. Folk and others, for erection of 125-room hotel 76x134 feet. Address 116 N. Eighth street.

St. Louis—Construction.—William R. Bush Construction Co. has been incorporated, with capital of \$10,000, by Wm. R. Bush, F. J. Bush, H. Young and others.

St. Louis—Machine Company.—John Ramming Machine Co., with capital of \$10,000, has been incorporated by William A. Ramming, David R. Simpson and others.

St. Louis—Real Estate.—Twentieth Street Realty Co. has been incorporated, with capital of \$75,000, for dealing in real estate, etc., by John H. Wright, Thomas Wright and Jas. P. Dawson.

St. Louis—Real Estate.—Chartered: Local Realty Co., with capital of \$60,000, by Thos. Wright, W. R. Wright, James P. Dawson and others.

St. Louis—Contracting.—Chartered: Prendergast Contracting Co., with capital of \$5000, by Jeff J. Prendergast and others.

St. Louis—Fire-clay Company.—Chartered: Gravois Fire-Clay Co., with capital of \$6000, by Jason H. Moore of Webster Groves, Mo.; John P. Hoehn, George H. Price and others.

St. Louis—Lumber Mills.—Raithel-Gatlin Manufacturing Co. has been incorporated, with capital of \$6000, for conducting planing and lumber mill business.

Yates—Coal Mines, etc.—Coal Creek Co. has been organized, with capital of \$100,000, for development of coal mines, and has ordered erection of fifty miners' dwellings, etc. J. P. Hammett is president; C. K. Dalton, vice-president, and J. H. Hunter, secretary-treasurer.

NORTH CAROLINA.

Burlington—Real Estate.—Triple City Realty Co. has been incorporated, with capital of \$125,000, by John M. Cook, W. E. Sharpe and O. T. Crowson.

Charlotte—Water-works Improvement.—City will issue \$200,000 of bonds for enlarging its water plant and making needed improvements. For details write C. H. Campbell, superintendent.

Cliffdale—Telephone System.—Cliffdale Telephone Co. has been incorporated, with capital of \$5000, for construction of telephone system, by J. A. Calton, Ed. Thompson and G. W. Long.

Cliffside—Cotton Mill.—Cliffside Mills is reported as to enlarge its plant of 10,000 spindles and 610 looms.

Elizabeth City—Basket and Tray Company.—North Carolina Tray & Basket Co. has been incorporated, with capital of \$30,000, by J. D. Blades and others.

Lattimore—Lumber Company.—Chartered: W. T. Calton Lumber Co., with capital of \$12,000, by W. T. Calton, Lattimore, W. B. Gettys, Zite; M. E. Gettys, Goforth, N. C., and A. H. Martin, Lattimore. Mills are already in operation.

Mecklenburg County—Gold Mine.—Chonchilla Gold Reef Mines Co., Albany, N. Y., has purchased and will operate the Capps mine in Mecklenburg county.

Morehead City—Ice Factory and Electric-light Plant.—Cartaret Ice, Transportation & Storage Co. will enlarge plant by installation of 20-ton machine; also contemplates installing electric-light plant.

Raleigh—Land and Lumber Company.—Graham Land & Lumber Co. has been incorporated, with capital of \$100,000, by A. B. Andrews, F. H. Busbee and A. P. Andrews, Jr.

Rutherfordton—Publishing.—Chartered: Tribune Publishing Co., with capital of \$5000, by A. L. Rucker and others.

Salisbury—Granite Quarries.—Inion Granite Co., for developing granite quarries, has been incorporated, with capital of \$125,000, by Mary L. Wyatt, A. S. Heilig and John Doerflinger.

Spray—Cotton Mill.—Morehead Cotton Mills has contracted for 120 looms.

Spray—Knitting Mill.—It is probable that a knitting mill will be established, and the Spray Mercantile Co. is said to be interested.

Statesville—Mercantile.—Morrison Produce & Provision Co. has been incorporated, with capital of \$25,000, by J. R. Morrison and others.

SOUTH CAROLINA.

Abbeville—Real Estate.—New Enterprise Co. has been incorporated, with capital of \$2000, by James Buchanan, H. H. Lomax, L. A. Richie and T. H. Amos, for dealing in and improving real estate.

Batesburg—Mercantile.—L. D. Cullom Co., with capital of \$30,000, by L. D. Cullom and others.

Charleston—Real Estate.—Eagle Real Estate Co. has been incorporated, with capital of \$15,000, by T. J. O'Connell, H. M. Quale and others.

Columbia—Mercantile.—Chartered: Lorick & Lawrence, with capital of \$144,000, by W. B. Lawrence and others.

Darlington—Iron Works.—Wilson & James will improve iron works by installation of new equipment.

Florence—Flour Mill.—D. A. Layton has installed new burr meal and feed mill.

Florence—Foundry and Machine Shops.—Young & Chase will enlarge foundry and install bolt and pipe machinery.

Fork—Lumber Mill.—Rogers Company has been incorporated, with capital of \$5000, for manufacture of lumber, by F. C. and L. M. Rogers.

Georgetown—Drug Company.—Georgetown Drug Co. has been incorporated, with capital of \$5000, by L. B. Montague and others.

Georgetown—Lumber Company.—Mab Lumber Co. has been incorporated, with capital of \$20,000, by Le Grand Walker and E. L. Lloyd.

Graniteville—Chinaware Factory.—Pioneer Chinaware Co. has been incorporated, with capital of \$30,000, and privilege of increasing to \$100,000, for manufacture of chinaware, by C. B. Willis, W. A. Giles and others.

Leesville—Woodworking Factory.—Leesville Manufacturing Co. will increase capacity of its woodworking factory.

Manning—Land Improvement.—Land Improvement & Hardware Co. has been incorporated, with capital of \$20,000, by A. Levi, F. C. Thomas and D. M. Bradham.

Marion—Brick Works.—D. A. Layton is installing machinery with capacity for manufacturing 10,000 bricks per day, and which includes 100-horse-power engine and battery of boilers, 140 horse-power, which will increase capacity of his brick plant to 40,000 bricks per day.

Marion—Saw-mill.—D. A. Layton is erecting saw-mill with capacity of 10,000 feet.

Mullins—Planing Mill.—Alexander Lane will install sash, door and blind machinery in his planing mill.

Mullins—Lumber Mill.—Mullins Brick & Lumber Co. is installing 150-horse-power boiler, and will add two new planers to its mill.

Mullins—Brick Plant.—D. A. Layton of Marion is increasing capacity of his brick plant at Mullins.

Pee Dee—Brick Works.—D. A. Layton of Marion has purchased clay properties at Pee Dee and will erect plant for manufacture of brick.

Society Hill—Brick Plant.—Thomas R. Evans will install additional machinery for increasing capacity of his brick plant.

Union—Mercantile.—Chartered: Fant Bros. Company, with capital of \$40,000, by J. A. Fant and others.

TENNESSEE.

Chattanooga—Light and Power Plant.—Chattanooga Light & Power Co. will increase capacity by installation of four 500-kilowatt steam turbines.

Chattanooga—Refrigerator and Hardwood Manufacturing Plant.—Keyser Manufacturing Co., whose plant was burned some months ago and which is being rebuilt, has reorganized and increased capital from \$40,000 to \$300,000. Isaac B. Baylor of New York is president.

Chattanooga—Foundry.—Price & Evans will rebuild at once foundry reported burned at loss of \$10,000.

Dixon Spring—Tobacco Works.—Dixon Spring Tobacco Works has completed organization, electing S. M. Young, president; W. R. Denny, vice-president, and Webb Allen, secretary-treasurer; will begin work on erection of its proposed plant at once.

Jellico—Mercantile.—Chartered: Jellico Grocery Co., with capital of \$50,000, by U. S. Jones and others.

Jellico—Ice Plant.—Jellico Ice Co. has been incorporated, with capital of \$15,000, and will install 10-ton ice plant. W. S. Harkness, S. W. McComb, L. M. Scott and others are incorporators.

Knoxville—Lumber Company.—Logan & Maphet Lumber Co. has increased capital from \$8000 to \$24,000.

Knoxville—Soap Factory.—Rowland Dye Soap Co. has been incorporated, with capital of \$50,000, by George Rowland, Harman Kreis, Frank M. Boston and others.

Lafollette—Coal Mines.—W. H. Moseley of Hot Springs, N. C., and A. S. Emerson of Knoxville, Tenn., have purchased 70,000 acres of coal lands at Lafollette, and will open up coal mines at once.

Lawrenceburg—Educational.—Chartered: Lawrenceburg College, by T. C. Carter, W. R. Lewis, Robt. B. Williams and others.

Memphis—Tropical Fruit Company.—Memphis Tropical Fruit & Rubber Co. has been incorporated, with capital of \$5000, by L. W. Dutro, H. T. Lynch, Jerome Kennedy, W. M. Slack and others.

Mt. Pleasant—Furniture Factory, Fertilizer Factory, etc.—Company with capital of \$25,000 has been organized for establishing hardware business; \$20,000 furniture company and \$100,000 fertilizer company have also been organized, and will establish plants. For further particulars address Rufus C. Jackson, general manager, Mt. Pleasant Land & Improvement Co.

Mt. Pleasant—Real-estate Improvement.—Mt. Pleasant Land & Improvement Co., previously reported to be organized for development and improvement of real estate, etc., has been incorporated, with capital of \$25,000, and J. S. Hill, president; W. D. Cooper, vice-president; Rufus C. Jackson, secretary-general manager. For further particulars address the secretary-general manager.

Nashville—Piano Factory.—J. W. Lowery of Monroeville, Ohio, representing a piano-manufacturing company, is investigating with view to erecting \$20,000 piano factory in Nashville.

Nashville—Woodworking, Furniture and Wagon Factory.—It is rumored that the C. H. Michael Manufacturing Co. of La Porte, Ind.; Kendallville Furniture Co. of Kendallville, Ind., and the Hamilton Wagon Co. of Hamilton, N. Y., will remove their plants to Nashville, combine the three establishments and operate under one management.

Nashville—Telephone Company.—Roaring Fork Telephone Co. has been incorporated by Chas. Hardin, J. N. Holbrook, Henry Carter, F. F. Hardin and others.

Nashville—Tobacco Factory.—Nashville Tobacco Works has purchased site and will erect new \$50,000 factory.

Sparta—Lumber Company.—Eastland Lumber Co. has been incorporated, with capital of \$5000.

TEXAS.

Beaumont—Oil Wells.—Sharp Well Co. has been incorporated, with capital of \$10,000, to prospect for oil, by L. A. Carlton of Beaumont and J. R. Sharp of Dallas, Texas.

Cleburne—Laundry.—Cleburne parties have purchased Home Steam Laundry of Hillsboro, Texas, and will remove to that city.

Cooper—Axe-handle Factory.—W. D. Moren & Co. has been incorporated, with capital of \$4000, for manufacture of axe handles, etc., by W. D. Moren, W. L. Gibbs, J. R. Clem and James A. Smith.

Dallas—Mercantile.—Chartered: Dallas Millinery Co., with capital of \$50,000, by A. M. Porter and others.

Denton—Dairy.—Denton Dairy Co. has been incorporated for conducting dairy and creamery.

Dimple—Cotton Gin.—Dimple Gin Co. has been incorporated, with capital of \$2000, by W. T. Diviny, B. A. Dinwiddle, D. F. Harrison and others.

Dimple—Mercantile.—Chartered: Dimple Mercantile Co., with capital of \$2500, by B. A. Dinwiddle and others.

Fort Worth—Automobile Company.—Arlington Heights Automobile Co. has been incorporated, with capital of \$3500, by A. T. Byers, C. S. Mattison, Wm. Bryce and others.

Fort Worth—Mercantile.—Russell-Flato Commission Co., with capital of \$10,000, has been incorporated by L. L. Russell and others.

Fort Worth—Laundry.—Acme Steam Laundry will erect three-story building and equip as laundry at cost of \$10,000.

Galveston—Grade-raising.—Contract for raising grade of city of Galveston seven feet to a level with seawall (bids for which were recently advertised in these columns) has been awarded Goodhart & Bates of New York, who will place the required 11,000,000 cubic yards of filling for eighteen and one-half cents a cubic yard. City will issue \$2,000,000 of bonds necessary to pay for the grading.

Georgetown—Cotton Gins.—Gray Gin Co., reported recently as incorporated with capital of \$15,000, has two cotton gins in operation, and will erect two more later on.

Houston—Oil Wells.—Sunset Oil Co., with capital of \$10,000, has been incorporated by H. Prince, H. Hamilton and D. R. Beatty.

Marshall—Sewerage.—J. W. Maxcy of Houston has contract for constructing sixty miles of sewers at Marshall.

Palestine—Electric-light and Power Plant. Palestine Fuel & Gin Co. has amended its charter, and will add the manufacture of ice, gas, electric light, heat and power.

Poth—Cotton Gin.—A. H. Poth will rebuild cotton gin lately reported burned; will install four 70-saw gin.*

Quanah—Cotton Gin, Grist Mill, etc.—Quanah Gin & Feed Mill Co. has amended charter, increasing capital from \$20,000 to \$40,000.

San Augustine—Mercantile.—San Augustine Grocery Co. has been incorporated, with capital of \$25,000, by R. H. Hall, James C. Anderson and others.

Saratoga—Saw-mill, Planing Mill, etc.—John A. McShane and associates, who were reported recently to build saw-mill with daily capacity of from 100,000 to 200,000 feet of lumber at cost of about \$200,000, have organized the McShane Lumber Co., with capital of \$200,000, and in addition to the saw-mill will erect planing mill with capacity of 100,000 feet per day. Incorporators and directors include John A. McShane, John A. Croighton, E. L. McShane, George W. Brown, all of Omaha, Neb., and Frank W. Dearborn of Lake Charles, La.

VIRGINIA.

Clifton Forge—Flour Mill.—E. C. Smith of Craig county, Virginia, will establish flour mill at Clifton Forge.

Crewe—Electric-light Plant.—City contemplates installing electric-light plant. Address The Mayor.

Danville—Water-power-Electrical Development.—Danville Railway & Electric Co. has purchased water-power property six miles from Danville, and will develop same next spring at a cost of from \$80,000 to \$100,000. The power will be transmitted by electricity to operate the company's railway in Danville, and the surplus power will be sold for lighting, power and other commercial purposes.

Hampton—Telephone Improvements.—Hampton Telephone Co., W. H. Carter, manager, will expend \$40,000 on improvements.

Manchester—Paper Mill.—Standard Paper Manufacturing Co., C. H. Sutton, president, will double capacity of its Manchester mill by erection of two-story brick addition 20x200 feet.

Norfolk—Mercantile.—Chartered: The Four Company, with capital of from \$10,000 to \$25,000, C. R. Carvey is president.

Norfolk—Mercantile.—Chartered: Porter-Cowper Company, with capital of from \$5000 to \$25,000, by L. A. Cowper and others.

Norfolk—Mercantile.—Chartered: Old Dominion Mercantile Co., with capital of from \$6000 to \$40,000; H. W. Lane, president.

Norfolk—Bag Factory.—Virginia Bagging Co. has established new factory at 37 and 39 Nivison street for manufacture of bagging.

Point Pleasant—Gas Plant.—City will probably grant franchise to C. F. Lowther for installation of gas plant.

Portsmouth—By-product Factory.—F. S. Royster Guano Co. of Norfolk has purchased five acres of land in Portsmouth, and will

erect plant for manufacture of by-products of the other factories it operates.

Portsmouth—Dairy.—Riverside Dairy Co. has been incorporated with capital of from \$40,000 to \$100,000, and Joseph Grice, president.

Richmond—Cedar Works.—Richmond Cedar Works is installing new engine of 950 horse-power, with flywheel twenty-one feet in diameter and five feet wide, which will develop power for the entire plant. Preparations are also being made to furnish the plant with electricity; two generators of 500 horse-power each are being installed.

Saugersville—Saw-mill.—J. H. Michael & Co. will establish saw-mill.

Suffolk—Ice Factory.—Suffolk County Ice Co. has been organized, with capital of \$6000, by W. H. Swezey, R. J. Powers, W. R. Comfort, J. D. Beals and others.

Vesuvius—Mining and Manufacturing.—The Manganes Corporation of Virginia has been chartered, with maximum capital of \$300,000, and minimum of \$10,000, for development of manganese, iron ore and other mineral properties, manufacture of lumber, machinery and implements. R. D. Carey of Plainfield, N. J., is president; George Wilcox of New Providence, N. J., vice-president, and W. C. Fillmore of New York, secretary.

WEST VIRGINIA.

Chester—Amusement Company.—Rock Springs Amusement Co. has been incorporated, with capital of \$60,000, by N. C. De Ford, N. B. Billingsley, J. W. Clarke, C. B. Kenty and others.

Grafton—Silk Mill.—John W. Dawson and Thomas Haggerty, operating silk mills at Reynoldsville, Pa., propose organizing the West Virginia Silk Manufacturing Co. to build a \$150,000 silk mill at Grafton.

Huntington—Oil Wells.—Ajax Oil Co., with capital of \$24,000, has been organized by Geo. J. Neal, T. A. Null, H. C. Duncan, Jr., C. W. Campbell and others.

Huntington—Box Factory.—West Virginia Box & Lumber Co. has been incorporated, as lately reported, with capital of \$25,000, for manufacture of thin lumber for cigar boxes, letter files, etc., and all kinds of wood boxes; building will be three stories, 33x100 feet. Address J. C. Tipton.

Huntington—Gas and Oil Wells.—Salt Rock Oil & Gas Co. has been incorporated, with capital of \$25,000, by R. E. Vickers, T. W. Peyton, H. C. Gordon, C. L. Ritter and others.

Huntington—Machine Shops.—Huntington Engine & Machine Co. has been incorporated, with capital of \$10,000, by C. W. Campbell, Geo. F. Ratliff, W. K. Cowden, S. B. Gray, Jr., and others.

Lazearville—Glass Works.—Company has been organized, with S. George, president; T. H. Hammond, vice-president; J. W. Reeder, secretary, and Chas. R. Windsor, treasurer, to take over and operate the Frank Glass Works.

Mannington—Medicine Factory.—Basnett Menthol Ointment Co. has been incorporated, with capital of \$10,000, by C. A. Basnett, Chas. E. Jodiffe, Leroy Taylor and others.

Moundsville—Real Estate.—Moundsville Realty Co. has been incorporated, with capital of \$10,000, for dealing in real estate, by Charles I. Zirkle, S. A. Moore, M. C. Talbot of Philippi, W. Va., and C. L. Michael of Fairmont, W. Va.

New Martinsville—Drilling.—E. B. Miller Drilling Co. has been incorporated, with capital of \$10,000, by J. C. Trees, E. B. Miller, W. E. Culp, J. Lee Harne and others, to contract and drill for oil and gas. Address J. C. Trees.

Parsons—Timberland Development.—David L. Nutter Lumber Co. of Clarksburg, W. Va., has purchased and will develop 10,000 acres of timber land near Parsons.

Salem—Gas and Oil Wells.—Dog Run Oil & Gas Co. has been incorporated, with capital of \$15,000, to develop oil and gas properties, by Homer B. McKinley, Chas. A. F. Randolph, Lucien D. Lawther, Ernest Randolph and others.

Salem—Mining Machinery, etc.—Acme Tool Co. has been incorporated, with capital of \$45,000, for dealing in tools of all kinds, mining machinery, etc., by G. L. McKain of Salem, Clint Moore, H. C. Moore of Sistersville, W. Va., and others.

St. Marys—Boiler and Engine Works, etc. The Oil Producers' Manufacturing & Supply Co., reported recently as incorporated for manufacture of boilers, engines, all kinds of rope, machinery and castings, with capital of \$20,000, is the company which was reported as having purchased plant of the American Drilling Tool Co. W. B. Croft has been elected president; J. H. Ellsworth, vice-president; F. W. Hummel, secretary; F. J.

Hinderhiter, manager, and John Schauwecker, treasurer.

Welch—Coal Mines.—Jed Coal & Coke Co. has been incorporated, with capital of \$200,000, by William Leckie, W. R. Graham, Pocahontas, Va.; T. H. Wickham, Beckley, W. Va.; S. L. Flournoy, Charleston, and others.

Wheeling—Mining Tools.—Mead Manufacturing Co., with capital of \$25,000, has been incorporated for manufacture of mining tools, by C. Albert Mead of New York city, W. J. W. Cowden, William W. Rogers, D. A. Smith and John W. Adams of Wheeling.

Wheeling—Gas and Oil Company.—Federal Petroleum & Gas Co. has been incorporated, with capital of \$10,000, by John Ehrle, John C. Devine, Howard Thompson and others.

INDIAN TERRITORY.

Tulsa—Bottling Works.—Tulsa Bottling Works has been incorporated with capital of \$50,000, and will erect bottling works at once.

OKLAHOMA TERRITORY.

Alva—Ice Plant.—Demuth, Hagerty & Co. will increase capacity of their ice plant from ten to twenty-five tons.

Appalachia—Land Improvement.—Oklahoma Railway Town Co. has been incorporated, with capital of \$50,000, by R. J. Martin of Appalachia, J. H. Borders and E. C. Chambers of Kansas City, Mo.

Geary—Ice Plant.—A. R. Cawthorne, J. T. Kinkman and Smith & Schofield contemplate erecting ice plant.

Guthrie—Electric-light Plant.—Guthrie Electric Light Co. will install entirely new plant at cost of \$70,000.

Manitou—Implement Company.—Manitou Implement & Produce Co. has been incorporated, with capital of \$10,000, by C. A. Ingelhart, John E. Williams and C. H. Putman.

Oklahoma City—Laundry.—Ivy Laundry Co. has been incorporated, with capital stock of \$600,000, by John W. Simler, James H. Wells and Harry O. Shelby.

Oklahoma City—Live-stock.—American Live-Stock Co. has been incorporated, with capital stock of \$1,000,000, by C. F. Duffellmyer, E. G. Sutton, L. F. Nelson of Kansas City, Mo.; J. J. McMullen of Sand Creek, O. T., and others.

Olustee—Oil Company.—Olustee Oil Co. has been incorporated, with capital of \$100,000, by J. W. Edwards, T. H. Hardin, I. W. Satterfield and others.

Perry—Gold Mine.—Company has been organized, with capital stock of \$500,000, for development of gold mine on property of D. V. Adams, near Perry.

Romulus—Cotton Mill.—It is reported that J. E. Dunn of St. Louis, Mo., and L. Howard Lee of Texas will arrange to establish a cotton mill at Romulus.

Shawnee—Shops, etc.—Choctaw, Oklahoma & Gulf Railroad Co. will make extensive improvements to its shops and roundhouse; W. W. Wentz, Jr., general superintendent, Little Rock, Ark.

Walters—Realty Company.—Walters Realty Co. has been incorporated, with capital of \$5000, by W. E. Oakes, H. B. Holt, G. D. Latham and others.

Wildman—Mining.—Fort Worth Gold Hill Mining & Milling Co. has been incorporated, with capital stock of \$1,000,000, by E. A. Williams, E. W. Tucker, W. M. C. Williams and others.

BURNED.

Baltimore, Md.—Friedenwald Printing Co.'s plant damaged to extent of about \$75,000.

Baltimore, Md.—S. Seldeman & Bro.'s picture-frame factory damaged to extent of \$3000.

Baltimore, Md.—Plant of the Chloride of Silver & Dry Cell Battery Co. damaged to extent of \$27,000.

Bayou Goula, La.—Geo. M. Murrell Planting & Manufacturing Co.'s warehouse; loss about \$6000.

Berkley, Va.—B. Solomon's mattress factory, valued at \$1000.

Charleston, S. C.—Southern Spool and Bobbin Factory damaged.

Cheraw, S. C.—Chesterfield Lumber Co.'s dry-kilns; loss about \$7000.

Chickasha, I. T.—Plant of Chickasha Cotton Oil Co. damaged to extent of \$3500.

Clarksburg, W. Va.—Consolidated Ice Co.'s ice plant, valued at \$15,000.

Cross Roads, Ga.—J. R. Leads' and R. W. Massey's cotton gins.

Floyd, Va.—Scott's flour mill; estimated loss \$25,000.

Hiwassee, Ga.—Gibson Bros.' grist mill and planing mill.

Hollandale, La.—McCleary Cotton Gin, valued at \$4500.

Hot Springs, Ark.—John W. Burch's cotton gin; loss \$1000.

Marietta, Ga.—Glover Machine Works, damaged to extent of \$10,000.

McBee, S. C.—Plant of Carolina Lumber & Manufacturing Co. damaged to extent of \$1000.

McDaniel, Md.—J. T. Bradley's packing plant; estimated loss \$5000.

Moorefield, W. Va.—Potomac Tannery, Nacogdoches, Texas.—J. W. Cariker's saw-mill at Cushing; loss about \$5000.

Norfolk, Va.—C. B. White & Bro.'s wood plant.

Pleasant Dale, W. Va.—B. F. McVicker's flour mill, valued at \$5000.

Russellville, Ala.—County jail; estimated loss \$9000. Address county clerk.

Sherman, Texas.—Sherman Cotton Compress; estimated loss \$200,000.

Tampa, Fla.—Tampa Steam Ways Co.'s plant, valued at \$10,000.

Texarkana, Ark.—A. C. Lively's cotton gin, valued at \$5000.

Victoria, Texas.—Victoria Rice & Irrigation Co.'s warehouse; estimated loss \$30,000.

BUILDING NOTES.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Ashdown, Ark.—Sidney Stewart, Texarkana, Ark., has prepared plans for two-story frame addition to hotel for J. M. Johnson.

Atlanta, Ga.—Apartment-house.—James O. Wynne will erect an addition to the left wing of his new apartment-house at cost of \$13,500; present structure cost \$25,000.

Baltimore, Md.—Hospital.—South Baltimore Eye, Ear, Nose and Throat Charity Hospital has been incorporated by James E. Ingram, Sr., George Frame, Edward H. Fowler and others, for erection of new hospital.

Baltimore, Md.—Bowling Alley.—John I. Mann has awarded contract to Madary & Hardy for erection of two-story brick and wood bowling alley to cost \$6000.

Baltimore, Md.—Dwellings.—Maurice Debreull will erect ten three-story brick dwellings at cost of \$17,000.

Baltimore, Md.—Dwellings.—Henry E. Cook will erect forty two-story brick dwellings at cost of \$40,000.

Biloxi, Miss.—Buildings and Wharves.—Eskald & Haas of Biloxi have contract at \$5000 for rebuilding and remodeling the buildings and wharves at the Gulf Quarantine Station, Ship Island.

Centerville, Tenn.—Bank Building.—Hickman County Bank will erect new building, two stories, 25x60 feet. Address D. M. Cooper, cashier.

Charlotte, N. C.—Hotel.—C. Gresham and E. C. Register will organize the Gresham Hotel Co. to erect the proposed \$300,000 hotel previously reported.

Columbia, S. C.—Synagogue.—Sams & Carter have prepared plans for \$5000 synagogue for the Tree of Life Congregation; building will be of brick and stone, with electric fixtures, etc.

Darlington, S. C.—Church.—Sams & Carter, architects, Columbia, S. C., are preparing plans for proposed edifice of Episcopal church at Darlington; cost \$6000.

Florence, Ky.—Bank Building.—Bausmith & Weber, Johnson Building, Cincinnati, Ohio, are preparing plans for one-story press-brick building, 40x35 feet, for the Florence National Bank.

Florence, S. C.—Store Building.—Thomas M. and B. D. Rogers will erect store building.

Fort Fremont, S. C.—Buildings.—Quartermaster, Fort Fremont, will receive bids to duplicate until January 1 for furnishing material for repairs to buildings. Information furnished on application. United States reserves usual rights.

Fort Thomas, Ky.—Hotel.—Four-story brick hotel will be erected at cost of \$150,000; will have steam heat, electric equipment and all modern improvements. Des Jardins & Hayward, St. Paul Building, Cincinnati, Ohio, are preparing the plans.

Holly Springs, Miss.—College Addition.—J. H. Moselage & Co. of 236 Grove avenue, Memphis, Tenn., have been awarded contract of \$40,000 for erection of brick addition to the North Mississippi Presbyterian College at Holly Springs.

Hot Springs, Ark.—Temple and Sanitarium

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Washington

Colored Pythians will erect \$25,000 temple and sanitarium.

Huntsville, Ark.—Courthouse.—J. P. Hamilton has contract at \$13,000 for erecting Madison county's new courthouse.

Huntsville, Ala.—Warehouses.—Huntsville Wholesale Nursery Co. has purchased eighty acres of land near Huntsville, and will establish warehouses and shipping headquarters; will also build warehouse at Mercury.

Kansas City, Mo.—Theater.—Fred S. Stewart, proprietor of the Academy of Music, will expend \$30,000 in improving and remodeling his building.

Kansas City, Mo.—Buildings.—Goodwin & Few will erect frame dwelling to cost \$4000. R. E. Edmonson will erect brick dwelling to cost \$4500. Howard J. Vrooman will build brick apartment-house at cost of \$15,000.

Knoxville, Tenn.—Temple.—Local council of Jr. O. U. A. M. will erect \$50,000 temple.

Lake Charles, La.—Business Building.—Cagney & Christmas will have plans made at once by W. L. Stevens for erection of new structure to replace one lately burned at loss of \$30,000.

Laurel, Miss.—Office Building.—James Richard will erect two-story brick office building.

Leesburg, Va.—Dwelling.—Severn P. Ker of Pittsburg, Pa., is having plans made by Glen Brown of Washington, D. C., for erection of \$20,000 residence at Leesburg.

Lott, Texas.—School.—City will build \$20,000 schoolhouse. Address The Mayor.

Louisville, Ky.—Hotel Improvements.—Willard Hotel, W. S. Miller, manager, will expend \$30,000 in improvements, which include new boiler-house, installation of two boilers 18 feet by 72 inches, two electric dynamos 40x50 kilowatt, direct connected; steam heat, tile floors, etc. D. X. Murphy & Bro. are preparing plans.

Louisville, Ky.—Residence.—Clarke & Loomis are preparing plans for three-story brick and stone residence for Geo. D. Todd; cost \$30,000.

Louisville, Ky.—Church.—Mason Maury has completed plans for proposed \$40,000 edifice for First English Lutheran Church; contracts will be awarded January 1.

Louisville, Ga.—Courthouse.—Jefferson county has awarded contract for erection of its proposed \$40,000 courthouse. Address County Clerk.

New Cumberland, W. Va.—Bank Building.—M. L. Wells of Wellsburg, W. Va., is preparing plans for erection of two-story structure, 55x38 feet, for New Cumberland Savings & Trust Co.; cost \$75,000. Bids will be received about December 24 for erection.

Norfolk, Va.—Church.—Williamson Bros. have contract for erecting proposed edifice (lately reported) of First Lutheran Church.

Norfolk, Va.—Church.—Colored Baptist congregation has accepted plans for its proposed \$35,000 edifice. Address The Pastor.

Oklahoma City, O. T.—Courthouse.—City has voted issuance of \$100,000 of bonds for erection of courthouse. Address The Mayor.

Parkersburg, W. Va.—Warehouse.—R. M. Glendinning has awarded contract to Stephen Davidson for erection of \$10,000 warehouse.

Richmond, Va.—Store and Flats Building.—Augusta Grocery Co. will erect four-story store and flats building at cost of \$10,000.

San Antonio, Texas.—Residence.—St. Mary's Church will erect \$10,000 parochial residence. Address Thomas L. Conroy.

Savannah, Ga.—City Hall.—Sealed bids will be received until January 14, 1904, for erection of City Hall (lately reported), according to plans and specifications prepared by W. H. Whitcover. Bids to be accompanied by certified check for 3 per cent. of amount of bid. Copies of plans and specifications may be obtained upon application to architect, and a deposit of \$25, which will be returned to the bidder upon return of plans and specifications; Herman Myers, mayor.

Savannah, Ga.—Temple.—Masonic Temple Association, formed of members of the several Masonic lodges of Savannah, is arranging for the erection of a \$75,000 temple. Address A. B. Simmons, president.

St. Louis, Mo.—Union-station Improvements.—The presidents of the roads in the St. Louis Terminal Association are considering plans connected with the improvements of the Union Station at St. Louis; the plans involve an outlay of about \$6,000,000.

Timmonsville, S. C.—Store Building.—Sams & Carter of Columbia, S. C., are preparing plans for two-story department store for John McSweeney Company, 50x200 feet, and to cost \$15,000.

Washington, D. C.—Administration Build-

ing.—W. E. Spier has contract at \$46,826 for erection of the proposed administration building at Soldiers' Home.

Washington, D. C.—Dwellings.—Lewis E. Breuninger will erect two-story brick dwelling to cost \$5000 and two two-story brick dwellings to cost \$3500.

Washington, D. C.—Dwellings.—Charles W. King, Jr., will erect three three-story brick dwellings at cost of \$9000.

Wheeling, W. Va.—Business Block.—Herman Kreutzer has let contract for erection of three-story brick business block to cost \$6000 at Fulton.

Wheeling, W. Va.—Apartment-house.—Hartong & Son have contract for erecting two-story apartment-house of C. C. Smith previously reported; cost \$7000.

Wilmington, N. C.—Business Building.—Matt J. Heyer will erect four-story business building.

RAILROAD CONSTRUCTION.

Railways.

Atlanta, Ga.—Mr. H. M. Atkinson writes the Manufacturers' Record that the Tifton, Thomasville & Gulf, the Tifton & Northeastern and the Atlantic & Birmingham Railroad have been consolidated under the name of the Atlantic & Birmingham Railway Co. Concerning the possibilities of extensions he says that plans are under consideration, but there is nothing definite to announce. A report from Thomasville quotes officials of the company as saying that the proposed extension from Montezuma to Birmingham, Ala., will be built immediately, with a connection for Atlanta and also an extension from Waycross to the coast. George Dole Wadley is vice-president and general manager at Waycross, Ga. From La Grange, Ga., it is reported that the Atlantic & Birmingham is already grading from Montezuma to that place.

Baltimore, Md.—An officer of the Baltimore & Ohio Railroad denies the press report that the extension from Century to Buckhannon, W. Va., has been completed. He says it will not be finished for three or four months.

Carnesville, Ga.—The Georgia Traction Co. is said to be the name of the corporation which proposes to build an electric railway from Carnesville to Athens, thirty-three miles. Willis F. Brown is general manager and chief engineer. Grading is reported begun.

Charleston, W. Va.—Hon. William A. MacCorkle writes the Manufacturers' Record that the Imboden & Odell Railroad Co. has under contract fifteen miles of line, and will build sixteen miles additional next year, making thirty-one miles. It will be standard gauge, with probably six or seven miles of sidings.

City of Mexico, Mexico.—A concession has been granted to Jose Arce and Francisco Fernandez Castello for a narrow-gauge line from Tlalpujahua, in the State of Michoacan, to Anganguao, about twenty-five miles.

City of Mexico, Mexico.—The San Pedro branch of the Mexican Central has been completed, making direct connection between Monterey and Torreon.

City of Mexico, Mexico.—Reported that the National Railroad will soon start construction with a large force on the proposed branch to Salamanca, about thirty-six miles. It is proposed to continue the line to Guanajuato, thirty-six miles further.

Coalgate, I. T.—Track is reported laid on the M. K. & C.'s extension from Coalgate to Oklahoma City as far as the Canadian river, twelve miles west of Ada, which is thirty-four miles west of Coalgate. The line will be 117 miles long.

Durango, Mexico.—Reported that a railroad construction expert will make a trip over the proposed extension of the Mexican International Railroad to Mazatlan, and will report on the practicability of construction. J. G. Metcalfe is president.

Fort Smith, Ark.—The Fort Smith Suburban Railway Co. has been granted an amendment to its charter to build a mile extension to connect with the Iron Mountain line; also for a branch about five miles long to the Arkansas river opposite Van Buren.

Gulfport, Miss.—Mr. Willis W. Vall, chief engineer Gulf & Ship Island Railroad, writes the Manufacturers' Record that eight miles of the Mendenhall & Silver Creek branch is practically completed and in operation. Grading is under way on eight miles more. There will probably be thirteen and one-half miles of track by the end of the month. The line will be completed to Silver Creek, twenty-nine miles from Mendenhall, next year, and probably an extension will be commenced from Silver Creek to Columbia, twenty-seven and one-half miles, to connect

with the present Columbia branch. No other extensions are contemplated in the near future.

Lawton, O. T.—The Lawton, Wichita Mountain & Western Electric Railway Co. has deposited with the city clerk a certified check for \$1000 to comply with its franchise, and it is stated that rights of way are being rapidly secured and construction is to begin January 1.

Little Rock, Ark.—The application of the Fourche River Valley & Indian Territory Railroad Co. for a charter has been refused. Last spring a charter was granted for the Fourche River & Southern Railroad, which, it is stated, proposes to run through the same territory. G. B. Rose, representing the first-named company, is quoted as saying that the refusal of a charter will not prevent building the road, which is backed by the Fourche River Lumber Co., N. P. Bigelow of Chicago, president. It will run from Esau, twenty miles, to timber lands in Perry county. About eight miles of grading has been done.

Louisville, Ky.—Reported that the Louisville & Mt. Washington Interurban Railway Co. has interested Ohio capital in the plan for its line, and that it will be built.

Marlinton, W. Va.—G. W. Campbell of Dewdrow, Pa., who has timber land on Williams river, in this county, is surveying for a tramway to Marlinton. John W. Campbell is superintendent of the work.

Memphis, Tenn.—The report that the Memphis & Gulf Railroad Co. has purchased the Pensacola, Alabama & Tennessee Railroad is denied by President Chester H. Pond of the former in a letter to the Manufacturers' Record. He says that it is uncertain whether the property will be acquired.

Monte Ne, Ark.—President W. H. Harvey of the Monte Ne Railway writes the Manufacturers' Record concerning the report that he is interested in the plan to build a railway from Lowell, Ark., to Gentry, twenty or twenty-two miles. He says: "I am surveying two routes, one to Gentry and one to Siloam Springs, and do not yet know that either will be built. One only would be constructed, if at all."

New Orleans, La.—President L. S. Berg of the New Orleans Terminal Co. is quoted as saying that construction of the Frisco Belt Line will begin this week two miles outside the city, and construction will be pushed inward to the depot site.

New York, N. Y.—President A. H. Flint of Flint, Jones & Co., Mills Building, president of the Chesapeake Transit Co. of Norfolk, Va., writes the Manufacturers' Record that the company anticipates building only about five miles of double track. Continuing, he says: "This will probably be the same construction as we now have—90-pound rails, 7x9, 8x6 ties, 2640 to the mile; overhead construction, with 4-0 trolley."

Orizaba, Mexico.—Mr. R. B. Pegram, president and general manager of the Vera Cruz & Pacific Railway, informs the Manufacturers' Record that a line four kilometers long may be built around the city of Vera Cruz, giving the company a route of its own to the custom-house and wharves.

Paintsville, Ky.—Reported that the Great Northern Coal & Coke Co. will build a line fifteen miles long up Shelby creek to reach its lands. It will connect with the Big Sandy extension of the Chesapeake & Ohio Railway. John C. C. Mayo and others are said to be interested.

Palestine, Texas.—The International & Great Northern Railroad is reported to be extending the Houston, Oaklawn & Magnolia Park Railway, which it has just absorbed. This will improve its terminal facilities at Houston.

Portsmouth, Va.—The Bay Shore Terminal Railroad proposes to issue \$150,000 of receivers' certificates for betterments and improvements. A hearing on the application will be held December 14. The receivers are H. L. Page, J. A. C. Groner and B. W. Leigh.

Ravenden Springs, Ark.—The North & South Arkansas Railroad Co. has been chartered to build a line from or near Ravenden, Lawrence county, to the north line of Randolph county at or near Elm Store, twenty miles. The directors are R. D. Welch and A. N. Wylie of Ravenden Springs, H. F. Sloan and M. H. Long of Imboden, G. G. Dent of Annville, Ark., and Sereno Stanley of Koshkonong, Mo. The contract for the first ten miles has been let.

Richmond, Va.—It is reported that a survey is under way for an electric railway from Richmond to Urbana, on the Rappahannock river, fifty miles.

Rush, Ark.—The proposed Morning Star Railway has been granted an extension of its charter for six months. It is to run from Yellville to Newport, 125 miles. The directors are Caleb H. Jackson and Geo. H. Heaf-

ford of Chicago, Theo. Rockefeller, Streater, Ill.; Geo. W. Chase, S. G. Wilson, N. J. Bear-den and Cal Williams of Rush, Marion county, Arkansas. It is stated that the survey has been made and the route located.

Savannah, Ga.—The proposed extension of the Savannah & Statesboro Railway will, it is reported, be from Statesboro northwest via Portal to Garfield, on the Millen & Southwestern Railroad, about thirty miles.

Sedalla, Mo.—Mr. A. L. Strang writes the Manufacturers' Record confirming the report that he is interested in a plan to build a railroad connecting Sedalla, Marshall and Miami.

Shreveport, La.—Mayor Querbes has received a letter from Arthur D. Ritchie, president of the proposed Mississippi, Louisiana & Texas Railroad, to build a line from a point near Mobile, Ala., via Shreveport to a point in Oklahoma, and stating that the company is going ahead with construction in Louisiana. A meeting for a bonus may be held. The line may run via either St. Joseph, La., or Natchez or Vicksburg, Miss.

Somerset, Ky.—The city proposes to sell on December 28 a street-railway franchise which was purchased several months ago by parties who proposed to build the line, but who have not yet done the work. The project was to build a road from Somerset to Monticello. D. Gray Falconer, one of the parties interested, is reported as saying that the plan will not be abandoned if the franchise can be reclaimed.

South Pittsburg, Tenn.—Plans are reported under way for building an electric railway from South Pittsburg to Bridgeport, about five miles.

St. Joseph, Mo.—The Maryville & St. Joseph Electric Railway, seventy-two miles long, will, it is reported, have its surveys completed this month. George Custer is chief engineer.

St. Louis, Mo.—The Terminal Railroad Association is reported to have completed plans for financing the extensive improvements to be made to the union station and its other properties.

St. Louis, Mo.—Reported that the St. Louis, Iron Mountain & Southern Railroad will build a cut-off to reduce the distance between Muldrow and Van Buren, Ark., and that the Fort Smith Construction Co. will build the line. H. Rohrer is chief engineer.

St. Louis, Mo.—The Frisco system is reported to be surveying for an extension of the Sulphur Springs branch in the Indian Territory. J. F. Hinckley is chief engineer of construction, 800 Fullerton Building.

St. Louis, Mo.—Reported that the St. Louis & San Francisco Railroad will build the proposed extension of the Ozark & Cherokee Central Railway from Okmulgee, I. T., to Shawnee, O. T., seventy-five miles. J. F. Hinckley is engineer of construction, 800 Fullerton Building, St. Louis, Mo.

St. Louis, Mo.—Contrary to a report in circulation, Mr. S. B. Fisher, chief engineer of the Missouri, Kansas & Texas Railway, informs the Manufacturers' Record that the contract has not yet been let for an extension from Georgetown, Texas, to Austin and Maxwell, about fifty-five miles.

St. Louis, Mo.—The Missouri Pacific Railway is reported to be building a detached line three miles long through Caddo gap in the southern part of Montgomery county, Arkansas, to secure that route as part of the proposed extension from Greenwood to Gordon, on the Iron Mountain division.

Titusville, Fla.—J. O. Fries of Titusville is reported as saying that the proposed Central Florida & India River Railway will cross the Kissimmee river about Fort Gardner, and will run to the north of Lake Rosalie to the coast. H. Prescott Wells of Melbourne is also said to be interested.

Tuscaloosa, Ala.—The Tuscaloosa Belt Railway Co. has been granted rights of way through the lands of the Alabama Insane Hospital to extend its line to Holt. F. W. Monnish is superintendent.

Vincennes, Ind.—The Vincennes, West Baden & Louisville Traction Co. has been incorporated to build an electric and steam railroad from Vincennes to Louisville, Ky., via Jasper and West Baden. The directors are John L. Griffiths of Indianapolis, A. Norvale of Cincinnati, Bomar Taylor of Otwell, Ind.; J. O. Davis of Petersburg, W. H. Roush, E. P. Millett and T. H. Adams of Vincennes, and E. F. Cox of Worthington, Ind. The officers are: President, Thomas H. Adams, Vincennes; first vice-president, A. Norville, Cincinnati; second vice-president, S. N. Chambers, Indianapolis; treasurer, J. O. Davis, Petersburg; secretary, Fred Chapelle, Petersburg. Construction is to begin immediately. The Municipal Board & Securities Co. of Cincinnati is interested.

Vinita, I. T.—Reported that the Vinita, Pawhuska & Western Railway, a proposed line, will extend from Vinita through Bartlesville to Pawhuska and Bliss, and thence up the Salt Fork of the Arkansas river. Work is to begin in sixty days.

Washington, D. C.—The Southern Railway Co. will, it is reported, begin work on the extension from Burgin, Ky., to Danville, Ky., seven miles. W. H. Wells is engineer of construction at Washington.

Washington, D. C.—A bill has been introduced in Congress by Representative Sidney E. Mudd of Maryland authorizing the Anacostia, Surrattsville & Brandywine Electric Railway Co. to extend its line into the District of Columbia.

Welch, I. T.—Mr. S. E. Bear, president of the Cherokee Real Estate & Mining Co., writes the Manufacturers' Record confirming the report that he is interested in the proposed railroad from Baxter Springs, Kan., southwest into Oklahoma, but at present cannot give further particulars.

Weatherford, O. T.—The Colorado, Oklahoma & Southern Railway Co. of Weatherford has been chartered to build a line from a connection with the Atchison, Topeka & Santa Fe Railway in Woodward county, southeast through Day, Dewey, Custer, Comanche, Washita, Caddo and Kiowa counties to Weatherford, 100 miles. The stockholders are A. D. Cardwell, H. E. Bonebrake, J. E. Davis of Weatherford, C. H. Dewalde, J. H. Dillon and A. T. Keyser of Guthrie, C. M. Cade of Shawnee, J. M. Morrison of Independence, O. T., and J. M. Cook of Elk City, O. T.

Wilmington, Del.—The Kent & Cecil Electric Railway Co. has obtained an extension of time of nine months from October 1 last to build its line in Cecil county, Maryland. Edwin R. Cochran of Wilmington is president.

Street Railways.

Alexandria, La.—H. B. Chase, secretary of the Alexandria Progressive Union, has, it is reported, received a letter from an electric company of Atlanta, Ga., stating that it will send a representative of Alexandria to investigate conditions with reference to building a street-car line.

El Paso, Texas.—The Street Railway Co. has been granted a franchise for an extension through the Highland Park addition.

Jackson, Miss.—John Lorenz, general manager of the Jackson Electric Railway, Light & Power Co., writes the Manufacturers' Record saying that the proposed extension to Duttoville and also other extensions have been delayed, but that the company will be interested in receiving quotations on construction material for electric railways.

Shawnee, O. T.—The Shawnee Traction Co. has been chartered to build a street-railway system five miles long; estimated cost \$400,000. The stockholders are H. G. Beard, C. E. Jackson, J. W. Aydelotte of Shawnee, O. T., and J. J. Henry and D. J. McCanne of Denver, Col. Mr. Henry is quoted as saying that at least five miles will be built and in operation by April next. The line will traverse Main street from end to end, will run north on Broadway and will also have extensions on other thoroughfares.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Implement Manufacturers.—F. A. Fetter, Jr., Littleton, N. C., wants to correspond with manufacturers of agricultural implements, plows, etc.

Boiler Builders.—Columbia Machine and Iron Works, Columbia, S. C., wants to correspond with parties thoroughly familiar with building boilers.

Boilers.—See "Mining Equipment."

Boilers, etc.—W. S. Douglass, Russellville, Ala., is in market for two 80-horse-power tubular boilers, one 80-horse-power side crank engine, right hand; one Blake, Dean or Smith Odle pump, 10 inch suction, eight-inch

discharge, to carry pipe pressure 75 to 100 pounds; one 7x12-inch cylinder saddle-tank locomotive, 36-inch gauge.

Building Material.—Fraternal Home Hotel Co., 110 N. Eighth street, St. Louis, Mo., wants bids on electric lighting, plumbing, corrugated iron roofing, etc., for 125-room hotel.

Canning Machinery.—H. E. Reynolds, secretary Monroe County Horticultural Society, Aberdeen, Miss., wants to correspond with manufacturers of canning machinery.

Concentrating Ore Mill.—Pittsburg Fluorspar, Mining & Manufacturing Co., Smithland, Ky., will receive bids January 1, 1904, for concentrating ore mill for lead, capacity 100 tons of rough ore per day.

Conveyor.—Reed & Long, Rippon, W. Va., want drag or conveyor to carry cob corn about twenty-five or thirty feet to a power sheller.

Cooperage.—See "Woodworking Machinery."

Cotton Gin.—A. H. Poth, Poth, Texas, wants bids on four 70-saw gin, with condenser; also shafting, pulleys and belting.

Cotton Machinery.—Laib & Co., Louisville, Ky., are in market for some second-hand card clothing for use in cotton mill.

Cotton Machinery.—Leaksville Cotton Mills, Spray, N. C., is in market for second-hand cloth folder.

Dredging.—Chas. J. Allen, lieutenant-colonel, engineers, United States engineer office, 2001 I street N. W., Washington, D. C., will open bids January 5 for dredging in Rappahannock river, Milford Haven and Carters creek, Virginia. Information furnished on application.

Drug Manufacturers.—Spray Drug & Chemical Co., Spray, N. C., will purchase complete stock of drugs for new store.

Electrical Equipment.—See "Sewing Machines."

Electric Lighting.—See "Building Material."

Electric Street Railway Equipment.—Jackson Electric Railway, Light & Power Co., John Lorenz, general manager, Jackson, Miss., will be interested in having quotations on span wire, poles, ties, rails, insulators, trolley cars and such other supplies used in construction of electric street railways.

Engine.—See "Boilers, etc."

Engine.—See "Saw-mill."

Engine.—J. M. Stillwell, general manager Imperial Paint Mill, Birmingham, Ala., is in market for 100-horse-power engine, second-hand, and desires prices and full description at first writing.

Engine.—W. H. Clark, Stuart, Va., wants to purchase traction engine for plowing purposes with six or eight gangs attached.

Engines.—Cleveland Belting & Machinery Co., Cleveland, Ohio, wants 24x48 Corliss engine, 12x30 Corliss engine, 16x42 Corliss engine, 12x36 Corliss engine; also one 10 or 12-foot rope sheave pulley wheel, 25-inch face.

Engine Lathe.—John S. Bridges & Co., 15 South Charles street, Baltimore, Md., want second hand engine lathe, 20 or 22-inch swing.

Feed Mill.—P. O. Tatum, R. F. D. No. 2, China Grove, N. C., wants mill for grinding feed, capacity fifteen to twenty-five bushels per hour; also wants tank to hold from 1000 to 1200 gallons.

Fuel Briquettes.—George L. Broderick, Fort Meade, Fla., wants to correspond with manufacturers of fuel briquettes.

Gutter Drains.—Proposals will be received at office depot quartermaster, United States army, Room 507, Equitable Building, Baltimore, Md., until December 23 for furnishing all material and labor required in construction of gutter drains, etc., and raising sunken gutters and sidewalks at Fort Howard, Md. United States reserves usual rights. Information furnished on application to M. G. Spinks, captain, artillery corps, constructing quartermaster.

Ice Machine.—T. T. Wolfenden, Union Springs, Ala., is in market for new or second-hand 8 or 10-ton ice and refrigerating machine.

Ice Machinery.—Ira C. Rembart, St. Augustine, Fla., wants 10-ton cold-storage plant, also ice machine for freezing bottles of water for hotel use, such as is served to guests in rooms, on tables, etc.

Ice Plant.—R. K. Dent, Newton, Miss., wants to purchase 10 or 15-ton ice machine.

Ice Plant.—Florida Brewing Co., Tampa, Fla., will want either 60 or 75-ton compression machine and necessary outfit for 40-ton ice plant.

Ice Plant.—P. O. Box 203, Woodstock, Va., wants 8 to 10-ton ice plant.

Life-saving Stations.—Sealed proposals will

be received at Treasury Department, United States life-saving service, Washington, D. C., until December 22 for construction of life-saving stations, one at Bogue Inlet, N. C., and one at Fort Macon (Beaufort), N. C. Proposals for one or both stations will be considered, but proposals for both must state the sum for which bidders will construct each station if awarded contract for but one. Specifications, drawings, form of proposals, etc., can be obtained upon application to the superintendents of construction of life-saving stations, 17 State street, New York city; to superintendent of the seventh life-saving district, Shawboro, N. C., or to above office; S. I. Kimball, general superintendent.

Machine Tool.—E. Van Winkle Gin and Machine Works, Atlanta, Ga., wants to rent or purchase second-hand diamond core drill.

Machine Tools.—E. T. Burnett, purchasing agent Norfolk & Western Railway Co., Roanoke, Va., invites bids on following tools: Belt-driven driving wheel press of sufficient size for 30-inch driving wheel; belt-driven quartering machine of sufficient size to swing a 30-inch driving wheel, same to be equipped with a device for turning crankpins in wheels; 37-inch vertical turning and boring mill, horizontal driving box borer, double or single head; vertical keyseating machine, keyseating milling machine, grindstone complete with frame, bearings and pulley, eight-inch face by 60-inch diameter; 24-inch screw-cutting lathe capable of taking a bar five feet long, 32-inch drill press, one shaper, about 10-inch stroke; all to be furnished with necessary countershafts and detail drawings illustrating.

Mill Supplies.—See "Engines."

Mill Supplies.—See "Cotton Gin."

Mining Equipment.—Keystone Mineral & Mining Co., Jas. D. Hopewell, president, Sturgis, Ky., is in market for mining machinery, such as hoisting machine, boilers, pumps, crushers, separators, milling machines, etc.

Mining Equipment.—Buckeye Mining Co., Lawton, O. T., will later on be in market for mining equipment, mills, etc. Address L. J. Kalklosch.

Mining Equipment.—See "Concentrating Ore Mill."

Molding Manufacturers.—W. M. Bomae, Spartanburg, S. C., wants to correspond with manufacturers of molding for picture frames, etc.

Plumbing.—See "Building Material."

Poles.—City of Winder, Ga., is in market for 100 35-foot poles for electric-light distribution. Address Collier & Brown, engineers, Atlanta, Ga.

Printing Press.—Tribune Publishing Co., A. L. Rucker, editor, Rutherfordton, N. C., will want cylinder press and other office material.

Pump.—Rhode Island Co., Spray, N. C., will purchase 1000-gallon fire pump and 150-horse-power feed-water pump for boiler.

Pump.—See "Boilers, etc."

Pumps.—See "Mining Equipment."

Railway Equipment.—Harper Machinery Co., Park Row Building, New York, N. Y., wants to purchase for shipment within two to four weeks 150 tons of 30, 35 or 40 pounds to the yard relaying steel rails, with plates.

Railway Equipment.—See "Boilers, etc."

Road Roller.—Clark & Hines, 819 Equitable Building, Baltimore, Md., are in market for second-hand or new steam road roller; quote prices and name location.

INDUSTRIAL NEWS OF INTEREST.

Ball & Wood in Chicago.

Users of engines in the West and Southwest will be interested in noting that the Ball & Wood Co. of New York has established an office in Chicago. This company finds that trade conditions necessitate the new office, and quarters have been secured at 1247 Marquette Building. The Ball & Wood Co.'s New York offices are at 17 Battery Place, and its works are at Elizabeth, N. J., where it builds improved automatic cut-off engines.

Suitable for Textile Manufacture.

Manufacturers who may contemplate the installation of equipment for producing textile goods can secure suitable buildings and power supply on the Patapsco river near Baltimore, Md. The structures include a four-story stone building and auxiliary buildings, with newly-installed 300-horse-power steam and electric power plant. This property is especially suitable for any kind of textile manufacturing. V. G. Bloede, Station D,

Saw-mill.—Wm. E. Michael, 426 West Mulberry street, Baltimore, Md., wants to purchase 20-horse-power engine and saw-mill.

Saw-mill.—Sumter Telephone Manufacturing Co., Sumter, S. C., is in market for a small flexible shaft grooving saw outfit.

Sewer Construction.—Bids will be opened February 2, 1904, at office of the sewerage and water board—F. S. Shields, secretary; George G. Earl, general superintendent—No. 602 Carondelet street, New Orleans, La., for the construction of approximately sixty-six miles of sewers and appurtenances and the laying of 2.7 miles of water mains. Sewers will range in size from eight to twenty-seven inches, and in depth from five feet to sixteen feet, and will include 700 manholes and 300 flush tanks. Water mains will be in sizes from six to sixteen inches, and the laying of these water mains will be included in one of the sewer contracts. Bids will also be received on one contract for furnishing f. o. b. cars New Orleans approximately 2500 tons of cast-iron pipe, 113 tons of special castings and thirty-six gate valves, in sizes of pipe from six to forty-eight inches, and twenty-four hydrants. With bids on the contract for furnishing cast-iron pipe, valves and hydrants a certified check for \$1200 must be deposited. Sewer work will be divided in six contracts, and certified checks ranging from \$1000 on the smallest to \$2500 on the largest contract must be deposited. Bond for an amount equal to 25 per cent. of the gross amount of each contract will be required. After December 20 specifications, general plans and blank forms of proposal may be obtained at the office of the board, and plans and specifications can also be seen at office of Herling & Fuller, consulting engineers, 170 Broadway, New York. Usual rights reserved.

Sewing Machines.—H. H. Edwards, 810 North street, Little Rock, Ark., wants prices on sewing machines for overall and jacket factory; also electric motor and material for use in manufacture of these articles.

Stave Manufacturers.—See "Woodworking Machinery."

Tank.—See "Feed Mill."

Tin Door Plates.—John M. Stanley, Piedmont, W. Va., wants embossed tin house door number plates with embossed border, white ground; figures to be one and three-quarters to two inches high.

Traction Engine.—See "Engine."

Valves and Fittings.—Batter Machinery Co., Rome, Ga., wants names of manufacturers of standard valves and fittings.

Wagon Material.—Hampton Buggy Co., Leaksville, N. C., is purchasing material for heavy wagons, surreys and buggies.

Wood Wool.—The Democrat, Greenville, Tenn., wants addresses of manufacturers of wood wool.

Woodworking Machinery.—Southern Stave & Tie Co., C. H. Stoll, general manager, Lexington, Ky., will soon be in the market for a large quantity of staves, sawed and split; is now in market for machinery for making barrel heads, staves, etc.

Woodworking Machinery.—Marietta Mantel Works, Marietta, Ohio, is in market for second-hand woodworking machinery for mantel and furniture factory; wants full description and prices of machinery.

Woodworking Machinery.—I. L. Johnson, Dublin, Ga., will purchase equipment for coffin factory, new or second-hand.

Woodworking Machinery.—Hughes & Cooper, Carr, N. C., want to purchase second-hand planer; can use one as small as twelve inches, but must be heavy machine.

Baltimore, can give prices and terms on the property.

Oak Bark Lands.

Some valuable timber lands in Virginia have recently been made accessible to Eastern markets by two routes and low-freight rates. These lands comprise about 45,000 acres, timbered principally with white oak, poplar, hemlock, and great quantities of chestnut oak bark. Tanners should be especially interested in this property, as it is offered for sale. Full details can be obtained by addressing "Timberland," care the Manufacturers' Record.

Starett Company Orders It.

A most complimentary contract has just been received by the Hartford Blower Co. of Hartford, Conn. It calls for the third installation of Hartford Improved Adjustable Blowers and Exhaust Fans in the fine tool works of the L. S. Starett Co. at Athol, Mass. This Starett enterprise is one of the

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best known of its character in the world, and its selection of the Hartford apparatus is a flattering testimony of excellent quality, workmanship and efficiency in the Hartford products.

They Order Ball Engines.

It is a significant fact that those who order Ball engines are usually among the most prominent manufacturers, miners, railways and other engine operators in the United States. Two recent orders may be mentioned in this connection. They were given by the Continental Coal Co. of Columbus, Ohio, and the C. & B. Q. Railroad, the Continental order being a duplicate for a 400-horse-power machine. These engines are direct connected. The Ball Engine Co. of Erie, Pa., builds the Ball engine.

New Nernst Officer.

H. F. J. Porter, who has been associated with Westinghouse interests since last January as assistant manager of the publishing department, with offices in East Pittsburgh and at 10 Bridge street, New York, has been made second vice-president of the Nernst Lamp Co., of which George Westinghouse is president. Mr. Porter assumes the duties of general manager, with headquarters at Pittsburgh. This appointment does not affect Mr. Porter's relations with the publishing department at the present time.

Valuable Manufacturing Property.

Manufacturers who contemplate establishing plants in New England are advised to write Messrs. J. E. Conant & Co. of Lowell, Mass., for catalogue of a valuable manufacturing property which that firm will offer at public auction on December 17. The property is suitable for machine shops, car shops, weaving mills, shoe shops, bleaching or almost any manufacturing. It comprises the holdings of the Whitman Manufacturing Co., and is located at Whitman, Mass., a city containing some of the best-known factories of that section. Messrs. Conant & Co.'s catalogue gives full details.

Orders for Freight Equipment.

Southern shops continue to be important factors in supplying railway equipment in their section. The Georgia Car Co. of Atlanta, Ga., has just received the following orders for freight equipment: Five box cars of 50,000 pounds capacity, equipped with automatic couplers and air brakes, for Ocella, Pinebloom & Valdosta Railroad; eight flat cars of 50,000 pounds capacity, equipped with automatic couplers and hand brakes, for Cruger & Pace Lumber Co., and three flat cars of 50,000 pounds capacity each, equipped with automatic couplers and hand brakes, for the Mallett-Gray Lumber Co.

Big Insulator-Pin Factory.

The construction of private and public telephone and telegraph lines continues actively, and there is a consequent large demand for insulator pins, cross-arms, brackets, etc. Manufacturing these necessary articles is the chief work of the Alleghany Pin & Bracket Co., which recently completed a large woodworking plant at Covington, Va. The company has a daily output of about 30,000 pins, and is supplying some of the largest consumers in America. It also operates an electric-lighting plant and ice factory, power for the woodworking machines being obtained from the electric plant.

The Star Incandescent Lamp.

The world-wide use of electricity for lighting purposes is having a great effect on the demand for incandescent lamps. There is an increasing consumption of these lamps, and some of the best-known electricians have made a specialty of designing and manufacturing them. The proper construction of an electric lamp requires care, best materials, best and latest machinery, and the most improved methods in order that superior products may be put on the market. The Star Incandescent Lamp is one of the most successful. It is manufactured by the Standard Electrical Manufacturing Co. of Niles, Ohio.

Ordered From Scott & Williams.

There is a steady increase noted in the establishment of knitting mills throughout the South. One of the most recent plants is that of the Harriman Knitting Mills at Harriman, Tenn. This plant will produce ladies' fine-ribbed undershirts, and is to cost about \$15,000. It is interesting to buyers of knitting machinery to know that the Harriman company ordered its vest knitters from Messrs. Scott & Williams of Philadelphia, Pa. This firm has been building knitting machinery with great success since 1865, and offers equipments that combine all the latest ideas in approved construction to obtain the best results.

Large Stack for Mexico.

The E. Keeler Co. of Williamsport, Pa., reports a fair demand for its standard return tubular boilers, stacks and tanks, while it is kept busy all the time in filling orders for its water-tube boiler. A shipment of a large stack built at the Keeler works was completed last week. This stack is sixteen feet in diameter at the base, tapering to a diameter of eight feet in twenty-five feet in height, and has a total height of 230 feet above foundation. The material used is very heavy, the total weight running about 150,000 pounds. All the material is shipped "knocked down," and will be assembled at Mapimi, Mexico, for the Compania Minera de Penoles. It is stated this will be the highest stack in Mexico.

An Expert in Civil Engineering.

Civil engineering of the highest order is constantly called for in the advance of the South. The construction of water and sewerage systems, the development of water-power properties, the erection of electric plants and other work is seldom attempted nowadays without the advice of the best talent obtainable. It may interest, in this connection, to note that O. Perry Sarie, civil engineer, of Providence, R. I., has been engaged by the water-works committee of East Greenwich, R. I., to give them expert advice with reference to the cost and improvement of the water-works of that town. Mr. Sarie has established a reputation in his chosen field of endeavor and is especially desirous of furthering his work in the South.

Electrical Novelties for Boys.

The approach of Christmas makes it necessary that those of us who are interested in the boys investigate with a view of selecting presents that will give the recipients the most pleasure. Manufacturers of our day introduce toys and novelties in almost numberless quantity, and nearly all the mechanical appliances and machines of practical use are duplicated in limited size for the use of the boys. Articles that not only amuse, but also instruct, are especially suitable as gifts, and in the electrical field a most complete and varied line is now obtainable. The Ewing-Merkle Electric Co. of St. Louis, Mo., offers to buyers and dealers the latest and best electrical novelties and appliances for boys and issues a special catalogue concerning them. Send for catalogue.

Messrs. Brown & Hunter.

So extensive and varied have Southern business interests become that, as in other and older industrial sections, the need of public accountants has been felt. This want has not been supplied so thoroughly from the South itself as it will be in the future, but there are indications that the field will be given proper attention. This can be noted in the announcement of Messrs. Ralph H. Brown and Joel Hunter that they have entered this avenue of effort. They have formed a partnership as public accountants and auditors, with offices in the Empire Building, Atlanta, Ga., and their services are at the command of Southern manufacturers and other industrial workers, financial enterprises, mercantile houses and business concerns generally needing expert advice.

Georgia Car Contracts.

Southern car works are conspicuous in assisting to supply the demand for railway rolling stock in their territory. A steady inflow of orders is reported by the Georgia Car Co. of Atlanta, Ga., this company's most recent contracts including the following for freight equipment: Four flat cars forty feet long, 60,000 pounds capacity, for Greenbrier & Elk River Railroad, and eight box cars, 50,000 pounds capacity, for Georgia Northern Railway. The Georgia Car Co. is building for Coal River & Western Railroad the following: Five drop-bottom gondola cars of 50,000 pounds capacity, five flat cars of 50,000 pounds capacity, thirty-six feet long, and two box cars of 50,000 pounds capacity, thirty-six feet long. All the cars mentioned are to have automatic couplers and Westinghouse air-brakes.

Automobiles and Supplies.

It is evident to the most casual observer that the use of automobiles is on the increase. This demand for automobiles is being met by manufacturers, and one may notice that not only pleasure vehicles, but also those intended for business purposes, are being put in service. This growing demand makes it necessary that the A. L. Dyke Automobile & Supply Co. of St. Louis, Mo., increase its capital and provide betterments for properly meeting its increasing trade. Action to this effect has been taken by the company, and larger accommodations are being sought. The company manufac-

tures and imports complete automobiles, supplies and parts for same, furnishing the required parts for assembling into vehicles ready for the road. Inquiries are invited for descriptive literature and price-lists.

A Location for Factories.

The development of water-power properties in the South is attracting many manufacturing industries, both small and large, to the various places where this cheap power is available. At Elba, Ala., there has just been completed a dam, to which is being added electrical machinery for transmitting power for use by factories, and doubtless some important enterprises will locate there in the near future. The Elba Power Co. owns the new source of energy for industrial purposes, and states that the location is an ideal one for cotton mills, being situated where cotton can be obtained direct from the fields. Transportation advantages are at hand, with low freight rates, and exemption from taxation is provided for by legislative action. Manufacturers are invited to write the Elba Power Co. for detailed information.

The Latest in Dry Batteries.

Heavy buyers and constant users of dry batteries are notified that the Wesco Supply Co. of St. Louis, Mo., is offering an improved dry cell, named the "Red Shield Dry Battery," which will fill a want long felt by telephone companies and operators of annunciators, railway signals, etc. In other words, the battery is particularly adapted for all open circuit work requiring a "hustling" and quick recuperating cell, possessing an abundance of long life and reliability. This dry battery has been placed on the market after months of labor and experiment carried on for the purpose of securing materials to produce a standard of efficiency and long life combined, that would be superior to other dry cells. It is stated this battery will cost about twice as much, but will last at least three times as long as any medium-priced dry cell. It has an E. M. F. of 1.5 volts.

Taylor Improvements at Cumberland.

The improvements now being made to the Cumberland (Md.) plant of the N. & G. Taylor Co. of Philadelphia are extensive. They give increased efficiency in producing and finishing, enabling the company to give prompt service on shipments of tinplates of every description, also on blue annealed sheets of Nos. 6 to 16 gauge. There is being added in the open-hearth department a 40-ton four-motor traveling crane, span fifty feet; auxiliary hoist, five tons. The open-hearth building is being extended seventy-five feet, and continuous ingot-heating furnaces, with electrical charging and discharging devices, are being installed; also automatic conveyors to facilitate handling ingots direct to various departments. Other additions include two 150-horse-power return boilers, new electrical equipment with engine and 125-kilowatt Thompson-Ryan generator, and in the machine shops lathes, planers, shapers, etc., furnished by the American Tool Works Co. of Cincinnati.

Want Any Machinery?

Those who happen to be in the market for machinery and supplies of any kind will find that most satisfactory service can be obtained in the South. Dealers in that section have established their storehouses and are prepared to meet the demand for mill, factory and railway machinery and supplies in either large or small quantities. Messrs. Sabel Bros. of Jacksonville, Fla., are especially prominent as dealers in second-hand machinery and equipment in their territory. They take contracts from all sections of the country, and just at present have on hand a large supply of second-hand machinery, but in good working condition, to meet almost all requirements. They are offering 10,000 feet of good well casing, seven-and-one-half-inch pipe, for immediate delivery, at a very reasonable price. It will also interest buyers of rails to know that Sabel Bros. have recently been appointed distributors for Florida of light section rails, forty-five pounds and under, for the Carnegie Steel Co.

Railway and Electric Equipment.

Manufacturers of and dealers in railway and electric equipment report a steady call for the class of product which is their specialty. Buyers of this kind of machinery and supplies have a good field in which to obtain competitive prices when they are ready to award contracts, and will be interested in reference to a new source of estimates. This new source is provided by the establishment of the Railway & Electric Equipment Co., which has been incorporated to furnish rails, cars, locomotives, steam and power machinery, generators, motors, railway and metal specialties, etc. This company will both buy and sell. Its offices have been established at

1341 Real Estate Trust Building, Philadelphia; 835 Ellicott Square, Buffalo, N. Y.; Perkins avenue and C. & P. Railway, Cleveland, and 1414 Tribune Building, Chicago. Ellwood C. Jackson, Philadelphia, is president; C. A. Ralston, Chicago, first vice-president; Frank J. Lewis, Cleveland, second vice-president; Charles F. Johnson, Buffalo, general manager and treasurer, and Robert W. Day, Buffalo, secretary.

Fully Up to Date.

In addition to the supplement of new words recently added to Webster's International Dictionary, the Biographical Dictionary and Gazetteer of the World have now been thoroughly revised, both tables being entirely reset. In the biographical dictionary several hundred names of persons more recently prominent have been added in the place of some that are now less sought for. Much additional information, as the dates of reigns or administrations, has also been included, and great care has been taken to verify many doubtful dates by comparison with the most recent authorities. In the gazetteer the figures for population and area have been made to agree with the census returns taken in 1900 and 1901 by the leading countries of the world, or with authoritative estimates where other data were not available. The spelling has been conformed to the adopted forms or rules of the United States board of geographical names, the geographic board of Canada and the Royal Geographical Society. The addition of sixteen new pages admits the insertion of a very large number of places that have recently become prominent.

The Charlotte Machine Co.

The value of expert practical knowledge in designing and equipping any kind of manufacturing plant is generally acknowledged. Some manufacturers have at times found to their regret and at considerable expense that to be prepared for the active competition of our day it will not do to equip plants except in the most careful manner. In order to have all the facilities that tend to increase quality and decrease the manufacturing cost of any product it is necessary that expert engineers of and contractors for factory establishments be secured. Southern manufacturers have fully recognized the desirability of expert knowledge, and nearly all the plants of any importance have been built and equipped from the ground up with the aid of the best mechanical advice. The Charlotte Machine Co. of Charlotte, N. C., has attained considerable success in its territory as mill engineer, contractor and dealer in machinery. This company gives estimates and makes contracts for complete manufacturing plants, reorganizes old plants and modernizes them to insure greater economy and increased production; also values textiles and other establishments for insurance, taxation, etc.

A Perfected Desk Pad.

People who use desks generally find it convenient to have a blotter pad or some device of that nature on their desks. Old-style blotter pads have their advantages, but their disadvantages include a proclivity to gather dirt and dust and ink, thus making the whole desk unsightly, and they have to be renewed frequently. These faults having been noticed by some progressive manufacturers, the latter directed their efforts to devising a new desk pad that would have decided advantages appealing to discriminating buyers. The result was the introduction of a pad with an attractive, smooth, cleanable writing surface, producing no nap or fluff to stick to desk or sleeve. This pad is made in imitation of oak, mahogany, walnut and cherry, and, it is stated, will always lie flat, and can be rolled without breaking. The pad combines an 18-inch measure always at hand, a comprehensive postal rate table, and an accurate interest computing table. This is the Cleano Desk Pad, manufactured by the Dento Manufacturing Co., Market and Lake streets, Chicago. The Cleano is especially adapted for advertising purposes, as a permanent card can be affixed to it and thus be frequently before the buyers' eyes. Write for descriptive circular.

For Electric Supplies.

One of the great demands in the South at present is that for electric supplies and equipment of all kinds. Electricity is being utilized in all its various ways for public and private service, and both manufacturers and dealers consequently find a profitable trade throughout the entire Southern section. Many companies have been established and provided facilities for supplying this demand, among them being the Florida Electric Co. of Jacksonville, Fla. This company's trade has grown rapidly, and steps have

been taken recently to provide even better facilities for catering to the buyer. New warehouses and factory have been secured at 24-28 W. Forsyth street, giving a floor space of 15,000 feet, and a much larger stock than heretofore will be kept on hand, especially for contract work. The Florida Electric Co. is prepared to take contracts for electrical construction, and in the past has undertaken and finished some important work. It has lately bought the entire stock of the Hesse Electric Co., Atlanta, Ga., and absorbed the Electric Supply & Construction Co., Jacksonville, in arranging its improved facilities and enlarged stock. Those who want estimates on any electric supplies or construction contracts will find it advantageous to obtain them from the Florida Electric Co. before closing their orders.

Important Action by Wolf Company.

One of the best-known manufacturers in its field is the Wolf Company of Chambersburg, Pa. An important action is announced by this company. It is the purchase of the entire plant and business of Messrs. Grisco & McFeeley of Philadelphia, and most of the mechanical equipment will be shipped to the Wolf works at Chambersburg. This purchase brings control of the repair and supply trade of mills adjacent to Philadelphia, and the Wolf Company will be prepared to reorganize and rebind rolls in Philadelphia; also to furnish bolting cloths and a full line of mill supplies of every description, in addition to power transmission machinery. The export and Atlantic coast department at Philadelphia will be in charge of James J. Pollard, with W. M. Nissley, a practical millwright, as traveling representative, and the offices at 804 Pennsylvania Building will soon be removed to 521-523 N. Twenty-third street. Thomas F. McFeeley, formerly of Grisco & McFeeley, has been appointed manager of the sales department, and will solicit contracts, dividing his time between the Philadelphia branch and the home office at Chambersburg. All export business of the Wolf Company will be controlled from the Philadelphia office, as will also all inquiries from Maine, New Hampshire, Vermont, Rhode Island, Massachusetts and Connecticut, Baltimore, Anne Arundel, Calvert, Charles, St. Mary's and Prince George's counties in Maryland, and Philadelphia, Delaware, Chester, Lancaster, York, Montgomery, Bucks, Berks and Lebanon counties in Pennsylvania.

A. H. Washburn.

The great development of the Southern textile industry has been promoted to a considerable degree by the facilities for equipping the mills. It is evident that cotton mills projected nowadays must be designed, built and equipped in such manner as will produce marketable cloths at the lowest manufacturing cost. A most important factor is to select that cotton machinery which embodies the very latest inventions and approved ideas. A. H. Washburn of Charlotte, N. C., is well known as a successful specialist in cotton-mill machinery and equipment. He supplies everything needed for the complete equipment of mills to manufacture yarn or woven fabrics of any kind, and during recent years has supplied some of the most successful Southern mills. Mill-owners know that practically all of the textile machinery in this country is supplied by New England enterprises that have made a specialty of their respective products and have become noted not only in America, but in foreign countries, for the perfection of their spinning, weaving and complementary machines. This is briefly referred to because Mr. Washburn, who has been mentioned, is Southern agent for the Saco & Pettee Machine Shops of Newton Upper Falls, Mass., builders of a large line of textile machines, and is agent for the Crompton & Knowles Loom Works, Curtis & Marble Machine Co., American Moistening Co., Foster Machine Co., Granger Foundry & Machine Co., Delahanty Dyeing Machine Co. and other prominent makers of mechanical devices needed in up-to-date cotton mills. Mr. Washburn solicits correspondence from companies that intend to build new mills or enlarge old ones.

Case-Hardened Sprocket Wheels.

There is now being offered for severe duty case-hardened sprocket wheels treated by a new process which makes the teeth and rims so hard as to be practically indestructible and gives them a smooth, uniform and close-grained surface, which the links can engage without cutting. It is worry, not work, that kills, and worry results from misfit between a man and his affairs. Read wear for worry, and the same is true in mechanics. For an illustration—the drive chain and its wheel. So long as their fit to each other is maintained they do not wear, and you need not

worry. When either begins to work against, instead of with the other, misfit has arrived and wear carries both toward the scrap heap. In practically all chain drives the number of links in the chain exceeds the number of teeth in both wheels. Each wheel too, therefore, comes into service oftener than each chain link, and the longer the chain the greater the disproportion. To postpone the misfit which causes rapid wear, the correct pitch of the wheel teeth must be preserved. Theory and practice agree on this conclusion, and it is stated that an exhaustive series of tests carried on for a period of two years has established the facts that until the wheel teeth begin to wear the wear on the chain is inappreciable, and that slight wear of the wheel teeth is followed by increasingly rapid cutting of both wheel and chain. Where chains are employed to handle gritty material or run in an atmosphere of abrasive dust, it is of great importance that the teeth of the sprocket wheels be hard enough to resist wear and maintain correct pitch. Case-hardened wheels are of advantage in all link-belt gearing, but are particularly recommended for use in cement mills, phosphate plants, stone-crushing plants, and for all work where grit is present. The sprocket wheels noted are manufactured by the Link-Belt Engineering Co., Niles town, Philadelphia, Pa. Write for literature on the subject.

TRADE LITERATURE.

Metal Ceiling and Roofing Reminder.

One of the innovations of recent years in the building-material line is metal ceilings and roofings. This product, as made by the Penn Metal Ceiling & Roofing Co. of Philadelphia, is the subject of a mailing card now being issued by the company as a reminder of its specialty.

Pumping Machinery.

A marked tendency of progress in the South during recent years is that not only large cities, but also many of the smaller municipalities, towns and hamlets have installed water-works systems. It is not necessary to emphasize nowadays the necessity for a plentiful supply of pure water for private and public service. The manufacturer of the pumping machinery needed in these plants is one of the important industries in the mechanical world. One of the prominent enterprises in this industry at the South is the Herron-Brady Pump & Foundry Co. of Chattanooga, Tenn. This company builds water-works pumping engines, as well as pumping machinery for other services, and has secured and completed many important contracts during recent years. Herron-Brady pumping machinery is designed to be economical in operation and durable in service. That the excellence aimed at has been attained is evident by the large number of the company's engines and other machines now in use. A pocket booklet summarizes the important facts regarding Herron-Brady machinery and lists the different sizes and capacities ready for shipment. Send for one.

About Cameron Steam Pumps.

Steam pumps of modern design and manufacture comprise a class of mechanical equipment in great demand. Some of the best-known inventors in the mechanical field have devoted their efforts to perfecting steam pumps, and the satisfactory machines now in the market are the result of their work. One of the oldest establishments of this country in pump manufacture is the A. S. Cameron Steam Pump Works, foot of E. Twenty-third street, New York. This company's pumps have been on the market since 1860, and during forty-three years have been well known to discriminating pump users. The most exacting users of pumping machinery have found Cameron types to give the best possible results, and acknowledge their superiority in design, material and workmanship. A pocket pamphlet about the Cameron pumps is now being sent to those who are interested. This little book is somewhat more interesting than the usual mechanical catalogue. Its contents aim to interest the reader sufficiently to secure a perusal and a favorable consideration for Cameron steam pumps when you happen to be in the market. With illustrations and brief but fully descriptive text the little publication tells its story to the point. The book's appearance from an artistic standpoint is most acceptable. Its cover page is a creditable imitation of a piece of quartered oak, on the back of which is an acorn and on the front is the Cameron trade-mark—that portion of a pump which so closely resembles an acorn in appearance. Present and prospective users of pumping machinery for any purpose are invited to write the company for booklet.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office Manufacturers' Record,
Baltimore, Md., December 9.

The Baltimore stock market has been very dull during the past week. The spirit of inaction shows no signs of abatement, and, with the exception of a stronger feeling towards the close of the period, there has been no change of tone. United Railways, G.-B.-S. Brewing and Atlantic Coast Line issues were the only features of the speculative list exciting anything like interest. There was also some little trading in investment securities.

In the dealings United Railways common sold at 87½ and 9; the incomes from 57 to 57½, and the 4s from 91½ to 91¾, while the Light & Power 4½s changed hands at 81. Consolidated Gas sold at 60½ to 61, and the 6s at 110¾. Seaboard common was traded in at 13, but the preferred was neglected; the 4 per cents sold at 71¼ to 71½, and the 5s at 98¾; Cotton Duck at 2 to 2½, and the incomes at 14; G.-B.-S. Brewing common at 7½, 8 and 9; the incomes at 27 to 30, and the 1sts from 46½ to 49¼.

Bank stocks sold as follows: Union, 118½; Citizens', 28; Western, 40; Marine, 36½. Maryland Casualty sold at 45.

Other securities traded in were as follows: Atlantic Coast Line Railroad, 106 to 110; Atlantic Coast Line 4s, 93 to 93¾; Atlantic Coast Line 4s (South Carolina), 100; George's Creek Coal, 86 and 87; Georgia & Alabama 5s, 106 to 106½; Northern Central 6s, 1904, 102¾ and 102¾; Atlantic Street Railway 5s, 106 to 106¾; Norfolk Street Railway 5s, 108; Savannah, Florida & Western 5s, 112; Baltimore & Ohio, 79; Columbia & Greenville 1st 6s, 117 and 117¼; Charleston & West Carolina 5s, 109; Georgia, Carolina & Northern 5s, 107½ and 108; Virginia Midland 2ds, 110¾; Baltimore City 5s, 1916, 121½; do. 3½s, 1930, 112¾; City of Montgomery 6s, 1924, 118½; Georgia Southern & Florida 5s, 113 and 113¼; Baltimore Traction convertible 5s, 100½; Baltimore & Potomac Tunnel 6s, 112½; International Mercantile Marine preferred, 19; Baltimore Fire Insurance, 22; South Bond 5s, 105.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
December 9, 1903.

Railroad Stocks.	Par.	Bid.	Asked
Georgia Sou. & Fla. 1st Pref.	100	99	99
Georgia Sou. & Fla. 2d Pref.	100	65	70
United Railways & Elec. Co.	50	8¾	9
Seaboard Railway Common	100	12¾	13
Seaboard Railway Preferred	100	21¾	24
Atlantic Coast Line Railroad	100	108	109½
Atlantic Coast Line of Conn.	100	220	249

Bank Stocks.	Par.	Bid.	Asked
Citizens' National Bank	100	27½	27½
Commercial & Far. Nat. Bank	100	300	300
Drovers & Mech. Nat. Bank	100	300	300
Farmers & Mer. Nat. Bank	40	65	65
First National Bank	100	140¼	156
German Bank	100	106	106
National Bank of Baltimore	100	110¼	112
National Exchange Bank	100	190	205
National Howard Bank	10	11¾	12¼
National Marine Bank	30	36	36
National Mechanics' Bank	10	26	28
National Union Bank of Md.	100	117	117
Second National Bank	100	190	205
Third National Bank	100	125	125
Western National Bank	20	39¾	40½

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked
Baltimore Trust & Guarantee	100	245	275
Fidelity & Deposit	50	133¾	140
International Trust	100	90	93
Maryland Casualty	25	44	44
Mercantile Trust & Deposit	50	129	140
U. S. Fidelity & Guaranty	100	100	120

Miscellaneous Stocks.	Par.	Bid.	Asked
G. B. & S. Brewing Co.	100	7½	10¼
United Elec. L. & P. Pref.	50	40	40
Consolidated Coal	100	70	76
Consolidated Gas	100	60½	62

Railroad Bonds.	Par.	Bid.	Asked
Albany & Northern 1st 5s	100	93¾	93¾
Atlanta & Charlotte 1st 7s, 1907	100	108	108

TABLE OF CONTENTS.

EDITORIAL:	Page.
No Isthmian Canal or National Dishonor	397
The Cotton Crop and Its Pressing Problems	397
Official and Individual Statistics	398
Type of a Man for the Presidency	398
Another National Holiday—No	398
A Mistake About an Educational Conference	399
International Mercantile Marine	399
"A Powerful Man Physically"	399
Ending a Representative Career	399
Shipbuilding at Jacksonville	400
For Power at Chattanooga	400
Investments in Mississippi	400
Georgia's 1903 Assessment	400
A Forestry Suggestion	400
Secrecy in Machinery Trade	400
Wants Agencies	400
How Interest in the South Is Increasing	400
Types of West Virginia Developers	401
The Levee Convention	402
In the Birmingham Iron Market	402
To Curtail Production	402
Sales of Storage Oil	402
Lake Borgne Canal	402
To Fight the Boll-Weevil	404
Sully's Message to the South	404
Pipe Made at Lynchburg	405
The Pig-Iron Market	405
New Furnace at Gadsden	405
Pig-Iron Production	405
South Carolina Tin	405
RAILROADS:	
Mississippi's New Line	405
Atlantic & Birmingham	405
Gulf & Ship Island	405
Progress on Gould Extensions	405
Texas, New Mexico & Western	405
Atlantic & North Carolina	405
North & South Arkansas	405
Morning Star Railway	405
Coalgate to Oklahoma City	405
Colorado, Oklahoma & Southern	405
Through Caddo Gap	405
Nashville & Lewisburg	405
Midland Valley	405
Important Official Change	405
Railroad Notes	405
FOREIGN TRADE:	
Trade With Spain	407
Rubber Goods in Austria	407
Wants Large Paper Bags	407
Wants Turpentine Oil	407
Openings in Warsaw	407
Phosphates in New Zealand	407
For the Iron Trade	407
Call from Colombia	407
Want Sheet Working Machines	407
Hand Gins for Porto Rico	407
TEXTILES:	
Wampum Cotton Mills	407
Seeking Cotton-Mill Location	407
The Cotton Movement	407
For a \$15,000 Silk Mill	407
Textile Notes	407
Quotations of Cotton Yarns	407
MECHANICAL:	
Lock-Corner Box Machine (Illus.)	418
A New Corliss Engine (Illus.)	418
New Strainer and Foot Valve (Illus.)	418
The Globe Manifold (Illus.)	418
A New Hoisting Engine (Illus.)	418
Wagner Cold-Saw Cutting-Off Machines (Illus.)	418
CONSTRUCTION DEPARTMENT:	
New Enterprises	419
Building Notes	419
Railroad Construction	419
Machinery Wanted	419
Industrial News of Interest	419
Trade Literature	419
FINANCIAL NEWS:	
Review of the Baltimore Market	419
Securities at Baltimore	419
The Controller's Report	419
Railroad Reports	419
New South Carolina Banks	419
Mr. Castles Goes North	419
New Corporations	419
New Securities	419
Financial Notes	419
Kaolin in Carolina	419

Atlantic Coast Line 1st 4s	93	93½
Columbia & Greenville 1st 6s, 1916	117	117
Georgia, Car. & North, 1st 5s, 1929	107½	108½
Georgia South. & Fla. 1st 5s, 1945	113	114
Georgia Pacific 1st 6s, 1922	119¼	122
Piedmont & Cum. 1st 5s, 1911	105½	105½
Raleigh & Augusta 1st 6s, 1926	118	118
Savannah, Fla. & West. 5s, 1934	110	110
Seaboard & Roanoke 5s, 1926	108	108
Southern Railway Con. 5s, 1904	112½	112½
Virginia Midland 1st 6s, 1906	104	104
Virginia Midland 2d 6s, 1911	112	112
Virginia Midland 3d 6s, 1916	114	114
Virginia Midland 4th 3-4-5s, 1921	109	109
Virginia Midland 5th 5s, 1926	109	109
West Virginia Central Con. 6s, 1914	115	117
West Virginia Central 1st 6s, 1911	111	111
Wilmington & Wel. Gold 5s, 1935	115½	115½
Charleston City Railway 5s, 1923	106	106
Charleston Con. Electric 5s, 1909	82	90
Knoxville Traction 1st 5s, 1928	98	98
Newport News & Old Pt. 5s, 1938	90	90
Norfolk Street Railway 5s, 1944	106½	109
United Railways 1st 4s, 1949	91½	92½
United Railways Inc. 4s, 1949	57½	58
Seaboard 4s	71½	72
Seaboard 10-year 5s	98	99
Georgia & Alabama Con. 5s	106	106

Mt. V. & Woodby Cot. Dck Inc.	13	15½
G. B. & S. Brewing 1st 3-4s	49	49½
G. B. & S. Brewing 2d Income	29½	30
Consolidated Gas 6s, 1910	110½	110½
Consolidated Gas 5s, 1939	109	109

The Hamilton Trust Co. of St. Louis Mo., capital \$500,000 and having deposits of more than \$400,000, is reported absorbed by the Commonwealth Trust Co. also of that city.

[For Additional Financial News, See Pages 30 and 31.]

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**CONDENSED STATEMENT OF THE
First National Bank of Richmond, Va.**

NOV. 17th, 1903.

RESOURCES.

Loans and Discounts	\$4,165,643.49
Overdrafts	147.74
Other Stocks and Bonds	53,931.16
Banking House and other Real Estate	67,103.13
U. S. Bonds at par	612,580.40
Premium on U. S. Bonds	464,600.00
Virginia Bonds to Secure U. S. Deposits	82,290.21
Cash and Due from Banks	\$6,165,015.33

LIABILITIES.

Capital	\$500,000.00
Surplus and Profits, net	560,425.87
Reserved for Interest	9,154.16
Circulation	\$98,000.00
Deposits	3,744,054.66
U. S. Bond Account	142,500.00
Virginia Bond Account	464,600.00
	\$6,165,015.33

VIRGINIUS NEWTON, Pres. JRO. M. MILLER, JR., Cash.

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References by permission:

Central Natl. Bank, Natl. Capital Bank and James L. Norris, Patent

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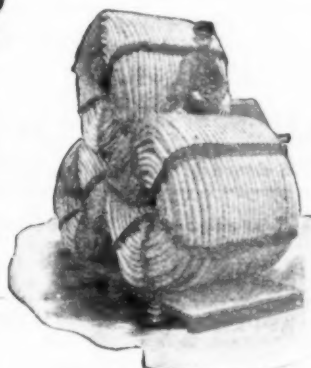
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The Comptroller's Report.

Mr. William B. Ridgely, comptroller of the currency, in his annual report to Congress, refers to the experience of the last four months as still further emphasizing "the one serious defect in our system that the variation in the volume of our currency, instead of responding to the demand for currency, depends on the market price of bonds." Continuing, he says: "Until our bank-note circulation is made automatically to respond to demand for currency for daily cash transactions, without reference to the price of bonds, it will never be entirely satisfactory or efficient." The comptroller also renews the recommendation in the report for 1902 that the national banks be allowed to issue a portion of their notes uncovered by the deposit of bonds. "This," he says, "seems the most simple and practical as well as the safest way to introduce some elasticity into our bank-note circulation."

The report also shows the total capital stock of the national banks to be \$753,722,658 and the total surplus \$370,390,684. There has been an increase in the capital of more than \$48,000,000 and in the surplus and profits of nearly \$61,000,000. The deposits reached their maximum point last summer, showing a total of \$3,200,903,509. This was on June 9, and on September 9 there had been a decline of more than \$44,000,000. Loans and discounts reached their highest point on September 9, with a total of \$3,481,446,772. The deposits of the United States with the national banks amounted to \$140,411,900.

The national-banking system has now been in operation for more than forty years, the first certificate authorizing a national bank to begin business having been dated June 20, 1863. Up to October 31, 1903, there were chartered 7029 national banks, of which 1126 were conversions of State banks. Referring to the increase in the number of banks under the act of March 14, 1900, the report shows that the Southern States were second only to the middle Western States in the number of banks organized, the South having had a total of 421 banks, with capital of \$22,208,000.

Railroad Reports.

The Louisiana & Arkansas Railway Co. has issued the following comparative statement of the income account for the four months ended October 31, 1903: Miles operated, 147; gross earnings, \$212,761; operating expenses and taxes, \$164,916; net earnings, \$47,845; total net income, \$53,696. For the corresponding period of last year: Miles operated, 125; gross earnings, \$164,311; operating expenses and taxes, \$114,846; net earnings, \$49,465; total net income, \$51,003. These figures are furnished by Fisk & Robinson.

The Northern Central Railway Co. reports for October, 1903, as compared with the same month of last year: Gross earnings, increase, \$120,800; expenses, increase, \$117,700; net earnings, increase, \$3100. For the ten months ended October 31, as compared with the corresponding period of last year, gross earnings, increase, \$1,774,400; expenses, increase, \$1,691,400; net earnings, increase, \$83,000.

The Gulf & Ship Island Railroad Company reports for November gross earnings \$152,406, an increase of \$2854 as compared with the corresponding month of last year. From July 1 to November 30, gross earnings, \$790,910; increase, \$84,823.

New South Carolina Banks.

A dispatch from Columbia, S. C., reports that State banks have been chartered in South Carolina during the past

year as follows: Bank of Donalds, \$25,000; Bank of Honea Path, \$25,000; Gaffney Savings Bank, \$30,000; Bank of Chesterfield, \$15,000; Bank of Summerton, \$25,000; Bank of Clarendon, \$25,000; Bank of Hartsville, \$50,000; Kennedy Mercantile & Banking Co., Blackstock, \$20,000; Citizens' Bank, Timmonsville, \$30,000; Piedmont Bank at Piedmont, \$15,000; Loan and Exchange Bank of Greenwood, \$50,000; Bank of Hodges, \$25,000; Commercial Savings Bank of Camden, \$25,000; People's Bank, Bishopville, \$25,000; Bank of Springfield, \$20,000; Bank of Central, \$20,000; William Coleman & Co., Columbia, \$500,000 (not yet organized); Bank of Saluda, \$5000; Sumter Banking & Mercantile Co., \$50,000; Bank of Carlisle, \$10,000; Bank of Lake City, \$5000; Bank of Rock Hill, \$75,000.

Mr. Castles Goes North.

J. W. Castles, president of the Hibernia Bank & Trust Co. of New Orleans, has, according to a dispatch from that city, resigned, and will become president of the Guarantee Trust Co. of New York city on January 1. Mr. Castles, it is stated, went from Fort Worth, Texas, to New Orleans twelve years ago and engaged in the wholesale grocery business, the firm being Cameron & Castles. He became president of the Hibernia National Bank, which was merged into the Hibernia Bank & Trust Co. two years ago. It is further stated that J. J. Gannon of Houston, Texas, who is a vice-president of the Hibernia Bank & Trust Co., will now become its president.

New Corporations.

The Bank of Melville has begun business at Melville, La.; cashier, D. E. Dunlap.

The Bank of Hydro, Okla., has been authorized to begin business; capital \$10,000.

Reported that R. E. Maddox and others will start the National Bank of Commerce at Fort Worth, Texas, about January 1.

A new State bank has, it is reported, been organized at Bryantsville, Ky., with R. G. Pettus as president; capital \$15,000.

The Citizens' Bank of Cairo, Ga., capital \$25,000, has received its charter. The incorporators are L. B. Powell and others.

The Silver City Bank of Silver City, Miss., capital \$25,000, will, it is reported, be established by R. C. Stubblefield and others.

It is reported that a bank with \$30,000 capital will be established at Leesville, S. C., all the capital having been subscribed.

The Citizens' National Bank of Calvin, I. T., has been organized; capital \$25,000; C. C. Atwood, president; A. P. Sellsor, cashier.

It is reported that a new private bank will be established at Bowling Green, Ky., by John F. Dunavan, R. K. McGinnis and others.

The Pearl River Bank of Columbia, Miss., is reported in process of organization, those interested being F. A. May of Brookhaven, J. T. Rankin of Columbia and others.

The First National Bank of Fairview, Okla., has been approved; capital \$25,000. The organizers are Arthur Hess, David Story, J. E. Garnett, T. E. Elmore and M. S. Miller.

The Markham National Bank of Markham, Texas, is approved; capital \$25,000. The organizers are A. A. Moore of Cortez, J. M. Moore, N. M. Vogelsang, S. S. Perry and W. T. Goode.

The Commonwealth Insurance Co. of Atlanta, Ga., has applied for a charter. The organizers are A. V. Toole, T. J.

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investigate securities and enterprises.
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The First National Bank of Santa Anna, Texas, capital \$25,000, is approved. M. Tyson, A. G. Weaver, Burgess Weaver, R. B. Hollingsworth and L. E. Collins are the organizers.

The First National Bank of Liberal, Mo., capital \$25,000, has been approved. The organizers are J. T. Long, Liberal, Mo.; J. H. Conrad, J. H. Rudisale, R. L. Baldwin and W. J. Lavery.

The First National Bank of Hartshorne, I. T., has been authorized to begin business; capital \$25,000; J. D. Chastain, president; J. P. Grady, vice-president, and C. R. Birnbaum, cashier.

The Atlantic Fire Insurance Co. of Richmond, Va., has been chartered; capital \$50,000 to \$200,000. The officers are: Frank A. Colley, president; Thos. H. Fox, secretary and treasurer.

The First National Bank of Rush Springs, I. T., capital \$25,000, has been approved. The organizers are William T. Hopper, J. A. Slaton, A. L. Dicks, J. W. McCullough and J. M. Jones.

The Fidelity Building and Loan Association of Georgetown, S. C., has applied for a charter; capital \$100,000. The incorporators are Walter Hazard, W. D. Morgan, J. B. Steele and others.

The First National Bank of Munday, Texas, capital \$25,000, is approved; organizers, R. V. Colber of Stamford, J. C. Bryant, W. A. Baker, R. C. Montgomery, J. F. Pool and F. G. Alexander.

The Workers' Mutual Life & Health Insurance Co. of New Berne, N. C., has been incorporated by E. N. Riggs, A. H. Green, W. J. Perry, W. C. Jones, W. J. Osteen, A. E. Pittman and others.

The Nacogdoches Abstract Co. of Nacogdoches, Texas, capital \$10,000, has filed its charter. The incorporators are Marguerite Raye, Robert Lindsey, W. H. Harris, June C. Harris, all of Nacogdoches.

The Capital Benevolent Insurance Co. of Columbia, S. C., has been chartered. The officers are: J. H. Johnson, president; R. L. Hickson, vice-president; B. J. Ramsey, secretary; C. A. Thompson, treasurer, and R. M. Addison, manager.

The Louisa Citizens' Bank is the name selected for the new bank at Louisa, Va. Officers were elected as follows: Dr. E. A. Terrell, president; E. M. Cronk, vice-president; Dr. W. O. Smith and Dr. Frank Woolfolk were added to the board of directors.

The Mutual Building and Loan Association of Alva, W. Va., capital \$500,000, has been incorporated by J. W. Montfort, G. N. Bilby, E. A. Haines, W. H. Queen, P. A. Monroe, H. A. Noah, W. L. Peters, W. C. and E. G. Douglass and Fred Burgin.

The Texas National Bank of Dallas, Texas, has been organized; capital \$250,000; W. C. Padgett, president; W. G. Scarff, vice-president; D. E. Grove, vice-president; J. W. Blake, vice-president and cashier; B. C. Barrier and A. C. Wilson, assistant cashiers.

The Merchants and Planters' Bank, recently organized at Camden, Ark., has been incorporated; authorized capital \$50,000, of which \$29,000 is subscribed. T. J. Watts is president; J. L. Flenniken and Ed Harper, vice-presidents; B. C. Powell, secretary, treasurer and cashier.

The Beck & Doak Bank Co., capital \$200,000, is reported chartered at Alexandria, Va., to conduct a general banking business in Mexico and United States. It is authorized to own 10,000,000 acres of land. The incorporators are Eman L. Beck of the City of Mexico and W. E. Doak and A. C. Averingham of Terra Haute, Ind.

The National Exchange Bank of El

Paso, Texas, has organized by electing directors and officers as follows: H. C. Myles, president; H. J. Donan, vice-president; W. J. Harris, second vice-president; John M. Wyatt, cashier; Francis W. Gallagher, W. A. Stevenson, J. Geo. Hiltzinger, H. R. Wood, H. L. Davis. Capital \$100,000; surplus \$15,000.

New Securities.

Huntington, W. Va.—The school board offers to sell \$25,000 of bonds.

Orange, Texas.—Orange county has registered \$1980 of jail-repair bonds.

Hobart, Okla.—The city has sold \$37,500 of water-works bonds to a Chicago firm.

Gulfport, Miss.—The city has sold \$43,000 of street and water bonds to R. B. Fulton of Chicago.

Belzoni, Miss.—The city has sold \$20,000 of 6 per cent. electric-light and water-works bonds at par to Albert Kleybolte of Cincinnati.

Burlington, N. C.—The city is reported to have sold \$18,000 of 30-year electric-light bonds to the Robinson-Humphrey Company of Atlanta, Ga.

San Antonio, Texas.—The city has sold at par to a local capitalist \$30,000 of 40-year 5 cent. bonds voted by improvement district No. 2, fourth ward.

Marion, S. C.—The issue of 5 per cent. 20-year school-district bonds, amounting to \$12,000, has been sold to the Robinson-Humphrey Company of Atlanta, Ga.

Atlanta, Ga.—The Robinson-Humphrey Company has purchased the entire issue of \$390,000 of 30-year 4 per cent. bonds issued by the city of Atlanta at a premium of \$3261.

Financial Notes.

The Trinity Valley Trust Co. of Dallas, Texas, has increased its capital from \$16,000 to \$25,000.

The Guarantee Loan & Banking Co. of Dallas, Texas, has amended its charter to increase its capital from \$40,000 to \$50,000.

The Traders' Bank & Trust Co. of Holdenville, I. T., capital \$50,000, has, it is reported, been consolidated with the National Bank of Holdenville, capital \$75,000. The officers are: Charles E. Billingsly of Guthrie, president; K. M. McFarlin, first vice-president; Charles De Watteville, second vice-president; E. A. Edmondson, third vice-president; W. A. Taylor, cashier; L. J. Meyers and W. A. Scott, assistant cashiers.

Kaolin in Carolina.

Mr. A. C. Yearin, president of the United States Kaolin Co., has written to Governor Heyward of South Carolina that through Mr. Earl Sloan, the State geologist, he has gained valuable information about the kaolin deposits of the State, with the result that he has located in Aiken county a deposit of kaolin that is second to none in this country or abroad. He adds:

"The obstacle I am now meeting with is whether or not we have the clay in sufficient quantities, but this we can overcome by taking reputable men to see the excavations already made and the borings while they are on the ground, which could all be consummated in a few days. Within a short time I shall be in South Carolina to begin operations, and, having one or two men well known to me here, will visit the mine and testify as to whether they think the clay is there in sufficient quantity. While I know that your time is too valuable to give this matter much attention, my object in addressing you is that you may send a representative to see the

property and state the possible number of acres covered by clay and the depth of such deposits as proven by boring tests witnessed by him.

"I sincerely believe this step will be the means of revolutionizing the clay industry in South Carolina, which at the present is of the crudest form, and trust that you will give me the assistance which is in your power."

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OFFICE OF

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RICHMOND, VA., December 8th, 1903.
The Board of Directors have this day declared a dividend of TWO (2%) PER CENT., the same being dividend No. 33 on the Preferred Stock of this Company, payable January 15th, 1904, when checks will be mailed to all stockholders of record at the close of business December 31. The books for the transfer of Preferred Stock will be closed from January 1 to January 15, both days inclusive.
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Ads. marked * appear every other week. Ads. marked † appear in first issue of the month. Ads. marked ‡ not in this issue.

For Classified Index See
Pages 3, 5, 7, 9, 11, 13, 15
and 17.

Abbott, F. C. & Co.	23	Brown Corlias Engine Co.	1	Deuto Mfg. Co.	1	Incandescent Electric Light	29	N. J. Foundry & Mach. Co.	29	Smith, F. L. & Co.	42
Abrasive Material Co.	41	Brown, W. P., & Co.	21	Detroit Graphite Mfg. Co.	21	Indiana All Rail Works	52	N. J. Zinc Co.	44	Smith-Courtney Co.	47
Acme Road Machinery Co.	43	Brownell, The, & Co.	19	Detroit Lubricator Co.	21	Indiana Chain Works	52	Newman Mfg. Co.	26	Smith, H. B., Machine Co.	44
Adams Laundry Machinery Co.	2	Browning Engineering Co.	47	Diamond Drill & Mch. Co.	24	Ingersoll-Servant Drill Co.	24	Newport News Shipbuilding &	26	Smith, S. Morgan Co.	43
Affleck, George E.	1	Buckeye Engine Co.	47	Diamond Steel Steel Co.	24	International Acheson Graphite Co.	9	Dr. Dock Co.	26	Soule Steam Feed Works	43
Aitchison, Robt., Perf. Met. Co.	44	Buckeye Iron & Brass Works	51	District of Columbia Charter Co.	29	International Crescent & Con. Co.	9	New York Equipment Co.	35	Southern Lime & Cement Co.	41
Alabama Coal & Iron Co.	43	Buckingham, Paulson & Co.	53	Dixie Mfg. Co.	51	International Mercantile Agency	29	Niagara Hydraulic Engine Co.	35	Southern Cotton Oil Co.	41
Alabama Frog & Switch Co.	37	Buffalo Wire Works Co.	45	Dixon, Jos. Crucible Co.	49	International Sprinkler Co.	29	Niagara Mach. & Tool Works	29	Southern Engine & Boiler Wks.	41
Alabama Iron Works	4	Burrows Co., E. T.	45	Dodsworth, M. J.	49	Ironides Co., The.	19	Nicholson & Co.	29	Southern Hotel	41
Albergo Condenser Co.	54	Burt Mfg. Co.	45	D'Olier Engineering Co.	49	Jackson Mfg. Co.	43	Nicholson & Co.	29	Southern Iron & Equipment Co.	41
Alexander Bros.	24	Burton Vomer Co.	49	Domination Iron & Steel Co.	33	Jeffrey Bros.	49	Nile-Benett Pond Co.	34	Southern Pacific	41
Alexander, S. B., Jr., Co.	38	Bushnell, G. H., Press Co.	51	Downman-Poster Mfg. Co.	49	Jewett, Bigelow & Brooks	57	Norfolk & Western Railway	27	Southern Pipe Covering Co.	41
Alleghany Ore & Iron Co.	35	Byers, John F., Machine Co.	39	Dowdle Pump Co.	54	Joseph, Isaac, Iron Co.	57	Norfolk & Western Railway	27	Southern Railway Co.	41
Alleghany Pin & Bracket Co.	57	Byrne, F.	6	Drake Standard Machine Works	40	Kaiser, A. V., & Co.	35	Norfolk & Western Railway	27	Southwest Fly. & Mch. Co.	41
Allington & Curtis Mfg. Co.	40	Caine & Platt	37	Driscoll, John T., & Co.	26	Kelley, Ben. F., & Son	36	Norfolk & Western Railway	27	Spel, W. E.	41
Allis-Chalmers Co.	14	Caldwell, H. W., & Son Co.	41	Dufur & Co.	45	Kelly Island Line & Transport	36	Norfolk & Western Railway	27	Spencer & Hall	41
Alpha Photo-Engraving Co.	67	Caldwell, W. E., & Son	24	Dunn, Wm. J.	33	Kelly & Tanagerhill Co.	36	Norfolk & Western Railway	27	Sprague & Hall	41
American	51	Cameron, A. S., S. Pump Wks.	54	Dunning, W. D.	33	Kelly-Springfield Road Roller Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Air Compressor Wks.	43	Cameron & Barkley Co.	15	Dyer, D. H., & Son	26	Kennedy, L. E., & Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Blower Co.	15	Campbell & Clute Machine Co.	1	Dykema, K., & Son	26	Kennedy, Walter	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Cement Co.	9	Capitol City Art Glass Works	40	Eastern Granite Roofing Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Cotton Oil Co.	38	Cardwell Machine Co.	41	Easton Fdry. & Mch. Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Elec. Sup. & Mfg. Co.	38	Cardwell Machine Co.	41	Eaton, B. F.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Engine Co.	38	Carey, George H.	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Excelsior & Mch. Co.	48	Carey, Philip, Mfg. Co.	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Frog & Switch Co.	37	Carlton, Chas. W., & Co.	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Locomotive Co.	12	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Machine Co.	1	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Machine Co. of Wil-	54	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Amington, Del.	54	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Mfg. Co.	29	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Pulley Co.	25	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Railway Supply Co.	4	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Roofing Co.	47	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Sheet Steel Co.	58	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Ship Windlass Co.	2	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Spiral Pipe Works	56	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Steam Gauge & Valve	19	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Mfg. Co.	19	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Steam Pump Co.	34	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Supply Co.	61	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Tia Plate Co.	40	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
American Type Foundry Co.	40	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Andrews & Johnson Co.	51	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Andrews, Perry, & Bro.	54	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Anthracite Mch. & Supply Co.	37	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Apex Equipment Co.	37	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Arctic Machine Co.	37	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Armstrong, R. S., & Bro.	26	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Asphalt Ready Roofing Co.	47	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Atkins, E. C., & Co.	47	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Atlas Engine Works	17	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Audel, Theo., & Co.	49	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Audit Co. of New York	41	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Aultman Co., The	41	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Austin Mfg. Co.	42	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Babcock & Wilcox Co.	19	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bacon Air Lift Co.	54	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Badger, E. B., & Son Co.	51	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Badger Fire Extinguisher Co.	1	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baeder, Adamson & Co.	2	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bailey-Lobby Co.	10	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baldwin, John T., & Co.	9	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baldwin Locomotive Works	17	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Ball Engine Co.	17	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Ball & Wood Co.	2	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore Belting Co.	23	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore Engine Co.	30	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore Fidelity Warehouse Co.	30	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore-Maryland Engraving Co.	40	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Balt. Shipbldg. & Dry Dock Co.	40	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore Steam Packet Co.	36	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Baltimore & Ohio R. R.	36	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Barnes, W. F. & John Co.	11	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Barnett, G. & H., Co.	60	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Barr & Klam	6	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Barr, H. G.	2	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Barrett Mfg. Co.	2	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bartlett, C. O., & Snow Co.	4	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bates, James, Sons	4	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bates Machine Co.	18	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Beach, H. W.	49	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Beckley, A. J., Co.	44	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Belmont Iron Works	44	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bentley Co.	56	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bennett, G. L.	39	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Berry Hill Min. Spg. Co., of Va.	39	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bertch & Co.	1	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bickford Drill & Tool Co.	10	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Big Brushy Coal & Coke Co.	80	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bigelow, W. H.	80	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bird, F. W., & Son	45	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bird, J. A. & W., Co.	46	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bird, Wm. M., & Co.	47	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Birmingham Rail & Loc. Co.	35	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Blackley, A. R., & Co., Ltd.	1	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Blackless Mfg. Co.	11	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Blonde, V. G.	34	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Blythe, Richard A.	35	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bolton, J. E., Iron & Wire Wks.	45	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Bonner & Bonchert Press Co.	38	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Booth & Flynn, Ltd.	38	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Boston & Maine Railroad	26	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36	Norfolk & Western Railway	27	Stapley Electric Mfg. Co.	41
Boston Bell Co.	24	Carroll, George	47	Eclipse Machine Co.	45	Kilbourne & Jacobs Mfg. Co.	36</				

PROPOSALS.

TREASURY DEPARTMENT. Office of the Supervising Architect, Washington, D. C., November 30, 1903. Sealed Proposals will be received at this office until 3 o'clock P. M. on the 8th day of January, 1904, and then opened, for the construction (except heating apparatus, electric wiring and conduits) of the extension to the U. S. Post Office and Court House at Kansas City, Mo., in accordance with the drawings and specification, copies of which may be had at this office, or at the office of the Custodian at Kansas City, Mo., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 12 o'clock noon, December 15, 1903, and publicly opened immediately thereafter, to furnish at the navy yards, League Island, Pa., Washington, D. C., and the U. S. Naval Academy, Annapolis, Md., a quantity of rubber covered wire, brick, lime, Portland cement, sand, broken stone, granite sills, slate, muslin, glass, hardware, white and yellow pine, ingot and sheet copper, nickel bar steel, mixed acid, sodium nitrate, pitch, tar paper, pencils, pens, tracing cloth, type-writer paper, miscellaneous stationery, engine lathes, bending rolls, and altering monitor of smithery shop. Blank proposals will be furnished upon application to the Navy Pay Offices, Philadelphia, Pa., Baltimore, Md., and the Bureau of Supplies and Accounts, Navy Department, Washington, D. C. H. T. B. HARRIS, Paymaster General, U. S. N.

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 12 o'clock noon, December 15, 1903, and publicly opened immediately thereafter, to furnish at the Navy Yards, Portsmouth, N. H., Boston, Mass., and the Naval Training Station, Newport, R. I., a quantity of electric motors, arc lamps, switch boxes, tubing and fittings, rubber covered wire, miscellaneous electrical supplies, various machine tools, ash, white and yellow pine, hackmatack knees, oak, copper rod, yellow metal sheathing, bar iron, steel plates and shapes, steel castings, iron forgings, Portland cement, sand, rivets, spikes, asbestos pipe covering, linen hose and nozzles, naphtha distillate, iron pipe and fittings, oars, prepared cotton, erection of exhaust system, repairs to buildings, and filling in between retaining walls. Blank proposals will be furnished upon application to Navy Pay Offices, Portsmouth, N. H., Boston, Mass., and Newport, R. I. H. T. B. HARRIS, Paymaster General, U. S. N.

BOND SALE.

The City of Hawkinsville, Ga., offers for sale \$40,000 twenty-nine year bonds. Denomination \$1000. Coupon May and November, payable at office of City Clerk and Treasurer, Hawkinsville, Ga., in currency or New York exchange. Bonds dated November 1st, 1903. Free from city tax. Bids to be opened at 12 o'clock M., December 26th, 1903, by the Bond Commission. Sealed bids can be made for all or any part of said bonds, and must be accompanied by a certified check for five per cent. of the par value of the amount bid for. Successful bidders to pay for bonds allotted them January 14, 1904. Any further information cheerfully given.

Address bids to
T. J. HOLDER,
City Clerk and Treasurer,
P. O. Box 1, Hawkinsville, Ga.

TENDERS.

Sealed Tenders, marked "Quarry Tenders," will be received by the undersigned on or before noon of the 15th day of December, 1903, at the office of the Dominion Iron & Steel Co., Limited, Sydney, Nova Scotia, Canada, for the quarrying, crushing and delivering f. o. b. vessel of from 200,000 to 400,000 tons of limestone per year, to be taken from the quarries of said Company at Marble Mountain, Inverness County, Cape Breton, as per specifications. Copies of the specifications can be seen at the Company's office, together with blueprints and photographs showing quarry and plant. Work to begin January 1, 1904. Contract to be for three years. The party whose tender is accepted will be required to give a bond to the Company with a sufficient surety or sureties of due performance of his contract. The lowest or any tender not necessarily accepted.
(Signed) DAVID BAKER, General Manager
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TREASURY DEPARTMENT. Office of the Supervising Architect, Washington, D. C., December 2, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 4th day of January, 1904, and then opened, for the installation of two electric passenger elevators in the U. S. Appraiser's Warehouse, New York, N. Y., in accordance with the drawings and specification, copies of which may be obtained at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

SEALED BIDS will be received until January 14, 1904, for the erection of a City Hall for the City of Savannah, Georgia, according to plans and specifications prepared by H. W. Witcover, Architect, Savannah, Ga. Bid to be accompanied by certified check for 3 per cent. of amount of bid. Copies of plans and specifications may be obtained upon application to the Architect, and a deposit of twenty-five (25) dollars, which deposit to be returned to the bidder upon return of the plans and specifications. HERMAN MYERS, Mayor.

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 12 o'clock noon, January 5, 1904, and publicly opened immediately thereafter, for the construction of a laboratory on the grounds of the United States Naval Hospital, New York, N. Y. Plans can be obtained upon application to the architect, Mr. Ernest Flagg, 35 Wall street, New York, N. Y., and specifications upon application to the Naval Laboratory, Brooklyn, N. Y., or the Bureau of Supplies and Accounts, Navy Department, Washington, D. C. Blank proposals will be furnished upon application to the Navy Pay Office, New York, N. Y. H. T. B. HARRIS, Paymaster General, U. S. N.

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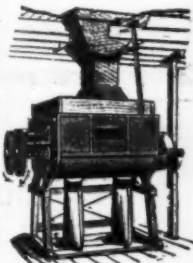
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Good Factory Sites, Cheap Power, Abundant Labor of the best quality, Good Railroad Facilities, Ideal Climatic Conditions, Pure Water for Bleacheries and Finishing Plants from a mountain creek running through the premises, having a discharge of 5,000,000 gallons in 24 hours, are some of the merits of this locality that will command the consideration of manufacturers.

For particulars, address

W. T. WEAVER, President.

ASHEVILLE, N. C.

POWER AT ELBA, ALA.

The Ideal Location for Cotton Factories.

Good staple cotton grown in abundance around and marketed at Elba; low freight rates; exemption from State, County and municipal taxation by recent act of Legislature, and cheap electric power. The Elba Power Company, a local corporation, has completed a Dam on Pea River developing a large amount of power, and is now installing wheels, dynamos, etc., to convert the power into electrical energy, to be supplied at low price to manufacturing concerns locating at Elba. The first large factory to locate at Elba will be given very advantageous terms and prices on power. Address

**THE ELBA POWER COMPANY,
ELBA, ALA.**

Miscellaneous Properties and Investment Opportunities.

FOR SALE.

A New and Up-to-date Cotton Mill, situated at Monroe, La., on Missouri Pacific Railroad and Ouachita River (navigable to large steamers).

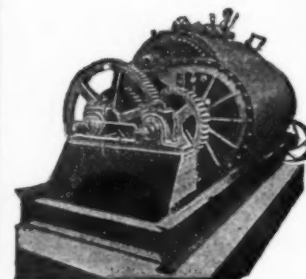
Mill of standard construction and containing latest improved machinery. The present equipment of 2500 spindles and 75 looms has been run one year, and is in the best of condition. Building, power plant, slubber, pickers, spoolers and operatives' houses sufficient for a 5000 spindle, 150 loom mill. Dynamo, machine shop equipment, slasher and cloth room machinery adequate for 10,000 spindles and 300 looms. Reason for selling: Company is a co-operative one with stock widely distributed, and it is impossible to get sufficient number of stockholders to agree to put up necessary funds to complete equipment and enlarge mill sufficiently to put it on a good paying basis. Plant as it now stands, with all accessories, including good flowing artesian well, cost \$100,000. Will sell cheap for cash, or part cash and balance on easy terms, to parties who will take property and increase sufficiently to put it on a good paying basis. Exceptionally low freight rates to northwest. Address

OUACHITA COTTON MILLS, Monroe, La.

BY J. E. CONANT & CO., - - - Auctioneers, OFFICE, LOWELL, MASS.

WHITMAN, MASS., December 7th, 1903.
This is to certify that at a meeting of the Stockholders and Directors of the Whitman Manufacturing Company, held this day, of which meeting due notice was given, it was unanimously voted by both Stockholders and Directors to sell the property herein described at public auction.

THE EXTENSIVE MILL CONSTRUCTED MANUFACTURING REALTY,
power plants and N. Y., N. H. & H. spur track of the Whitman Manufacturing Company, formerly Dunbar, Hobart & Whidden, at Whitman, Massachusetts, SUITABLE FOR MACHINE SHOPS, CAR SHOPS, WEAVING MILLS, SHOE SHOPS, BLEACHERY, or almost any manufacturing industry, will be divided into two separate and complete properties (a large one and a small one), and sold to the highest bidder at public auction. The sale will take place upon the premises, regardless of weather conditions, on THURSDAY, December 17, beginning promptly at 1:45 o'clock P. M.; the larger property will be offered first, and its purchaser will be given the immediate option of taking the smaller property at one third of his bid for the larger one; if this option is rejected, then the smaller property will at once be sold to the highest bidder; purchaser of first lot must deposit with or secure to auctioneers \$2000 at time of sale; purchaser of second lot must do same with \$1000; one-half purchase money on mortgage at five per cent.; property is situated on South Avenue opposite East Whitman Postoffice and Whitman railroad station (100 yards west of factory of famous Regal shoe), on Plymouth division of N. Y., N. H. & H. R. R., 21 miles south of Boston; electric cars of Old Colony and Brockton Street Railways pass the premises; Whitman is growing and prosperous, labor plenty and free from serious agitation; its factories include the Commonwealth Shoe & Leather Co., Atwood Bros. Box Manufactory, Whitman Paper Box Co., D. B. Gurney Tack Co. and American Shoe Finding Co.; the Regal shoe people are adding two 4-story wings, 100x40 feet; village has electrically lighted macadam streets, concrete walks, town water supply, fire and police departments, fine schools, low tax valuation, fair tax rate, and the town indebtedness is but \$8000; the large lot has 171,000 sq. ft. of land, extending from street to Hobart Pond; fine two-story brick building, 168x44 feet; two-story brick ell, 50x34 feet; brick ell, 319x56 feet; ella divided by fire walls and automatic fire doors (buildings have main shafting and pump); brick engine house with 150 H. P. Corliss engine; brick boiler house, with 3 Kendall & Roberts boilers, 150 and 80 H. P., and Blake fire pump; 80-ft brick chimney; also several wooden buildings for backsmith and other shops, coal and storage sheds; buildings have shop railway and cars and power elevators; spur track and branches lead to buildings and coal sheds; there are 10 town hydrants, hose and cart; smaller lot has 47,350 sq feet of land, adjoining larger lot and extending from South ave. to pond; excellent two-story brick structure 42x43 feet; brick one-story 21 1/2 x 38 feet; brick ell, 36x25 feet; brick engine house with 100 H. P. engine; brick boiler house with Kendall & Roberts 100 H. P. boiler; 75 feet brick chimney; also 4 wooden buildings for storage or shop purposes, hose house, cart and hose; main shafting in brick buildings; each lot is sold with the right to take from the canal or pond all necessary water for manufacturing purposes other than water power; buildings are in fine shape, 30 to 15 years of age; following sale of real estate, will be sold, by order of Benj. F. Bates, assignee of American Linen Fibre Co., a Tolhurst 48-in. hydro extractor, overhead belt driven; kler, 66 inches diameter, 72 inches long, 3/4 inch shell; 5 Knowles steam, vacuum, liquor and tank service pumps; Blake pumps, steam heater, copper and iron acid receivers, 10 large and extra large wrought and cast iron square and round tanks, wooden vats, lot of shafting and pulleys, 21 Roberts self-oiling hangers, wood framework; 2 tons 4-in. brass pipe, composition valves, elbows and flanges; 3000 ft. 1 1/2 in. iron pipe, platform scales, sizing machine, new 40 ft. 14 in. double belt grindstone, 7 Crosby steam vacuum and compound gauges, etc., etc. Send for catalogue to office of Auctioneer, where all inquiries by mail, telephone or otherwise should be made.



The Schwarz-System Brick Company,

**SAND-LIME BRICK
ENGINEERS.**

Factories Built by Us are Built Right
and Run Right.

Chemicals Are Not Necessary to
Make Good Sand-Lime Brick.

6-8-10 BRIDGE ST.,
MARITIME BLDG.,

- - - New York.

"Millions for Farmers"

**TEXAS
OBACCO
TRACTS**

Write for Full Information to

Exhaustive tests prove that the finest grade of **CUBAN LEAF** grows in East Texas on line of **The SOUTHERN PACIFIC**

Soils and Climate similar to famous Yucatan Abasco District of Pinar del Rio, Cuba.

T. J. ANDERSON, General Passenger Agent,

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FOR LEASE,

On Favorable Terms,

the valuable COTTON MILL PROPERTY known as Gray's Mills, on the Patapsco River, consisting of a four-story stone mill and auxiliary buildings, with newly installed 300 horse water, steam and electric power plant, suitable for any kind of textile manufacture. For further information address

V. G. BLOEDE,

Station "D", BALTIMORE, MD.

Analysis of Limestone and Slate properties for sale by

J. S. DAVITTE, Aragon, Ca.

Limestone	Slate/Pineness
Silica..... 2.125	57.40%
OxideAlumina 0.285	23.65%
OxideIron..... 0.565	4.45%
Lime..... 54.06%	3.23%
Magnesia..... 0.775	3.23%
Volatile..... 43.355	6.50%

FOR QUICK ACCEPTANCE.

We offer for sale an up-to-date milling plant, with dry kilns and planing mill attached. At the junction of two trunk lines of railroad. Timber has been estimated to cut about 22,000,000 feet. Rate to Brunswick, Ga., a deep water port, \$6.00 per car. Price \$25,000 cash.

This is a going concern and is ready for buyer to step right into a paying business. Good reasons given for wanting to sell.

BROBSTON, PENNING & CO.,

Brunswick, Ga.

Factory Wanted,

or a desirable site for the same for COTTON SPINNING for a large foreign company wishing to locate here.

Owners, Towns, Boards of Trade having anything desirable to offer will please send full particulars at once to

NICHOLSON & CO.

150 Broadway, N. Y.

FOR SALE. 2000 Barrels Coal Tar.

CARLOADS AND LESS.

ARMITAGE MFG. CO., RICHMOND, VA.

FOR SALE CHEAP—Good Circular Saw Mill. Mill 50,000 ft. daily capacity. Clark Bros. make. Saw mill complete. Steam feed, gang edger, live rolls, good planer, saws, tools and belts. Everything in first-class condition. Will be sold very cheap. **F. E. ROWLEY, Port Allegany, Pa.**

To Paper Makers!

The undersigned have from 15,000 to 50,000 pounds of redried, damaged cotton cloth, much of the fibre sound, which they desire to have made into wrapping paper. Correspondence solicited.

ADDRESS

THE HITT SALVAGE CO., Atlanta, Ga.

Bargains in Machinery

FOR IMMEDIATE DELIVERY.

BOILERS.

- 1 267 H. P. Abendroth & Root, 150 lbs. pressure.
- 1 250 H. P. and 200 H. P. Heine, 150 lbs. pressure.
- 1 72"x16" return tubular boiler, 105 lbs. pressure.
- 1 66"x15" return tubular boiler, 100 lbs. pressure.
- 2 42"x14" return tubular boilers, 100 lbs. pressure.
- 1 vertical boiler, 50 H. P.

ENGINES.

- 1 22x48 Hewes & Phillips Corliss.
- 1 17x42 Brown, cut-off, 100 r. p. m.
- 1 20x48 Harris Corliss.
- 1 14x28 Delamater Corliss.
- 1 13x21 Buckeye, tangye bed, 125 h.p.
- 1 16x24 Atlas automatic.
- 1 9x8 Climax automatic.
- 1 16x30x48 Hamilton Corliss, tandem.
- 1 13x20x15 Armstrong & Sims, c. c.
- 1 13x19x15 McIntosh & Seymour, tandem.

COMPRESSORS.

- 1 24 and 24x30 Rand Straightline type C, steam driven, 1320 ft. free air.
- 1 12 and 14x14 Ingersoll-Sergeant.

ELECTRICAL.

Send for our complete list of Generators and Motors of all types and voltages.

THOMPSON SON & CO.

114-118 Liberty St. NEW YORK CITY.

FOR SALE.

- BOILERS**—50 h. p. Hor. Tubular.....\$240
- 250 " Watertube.....440
- ENGINES**—30 " McIntosh & Seymour 160
- 15 " Gas Engine, "Otto".....180
- 60 " Westinghouse.....280
- 125 " N. V. Safety.....680
- 175 " Corliss.....970
- DYNAMO**—120 lights Edison.....138
- 180 " Onondaga.....135
- 200 " Mather.....150
- 270 " Edison.....190
- 510 " Edison.....298
- 1000 " Edison.....540

American Electric Supply & Mfg. Co.
27 Thames St., New York City.

MENGEL'S MACHINERY EXCHANGE

15 H. P. Geyser Portable Boiler and Engine on wheels. 25 H. P. Portable Duvall on skids. 10 H. P. Baxter Engine and Boiler combined. 55 H. P. White & Middleton Gas or Gasoline Engine, 12" by 36". 60 H. P. Hamilton-Corliss Engine, directly connected to 25-ton Linde Ice Machine. 5 and 10-ton Vertical Compressors. 4 25 and 35 H. P. Horizontal Engines. Sharp's Collar and Cuff Ironer. Band Starcher and Ironer. 50 gal. Copper Starch Kettle. 60-light Dynamo. 25 1/2 volt Manhattan Arc Lights. Cylinder and Job Printing Presses. Paper Cutters. Complete Plants and Machinery of all kinds Bought, Sold and Exchanged. Nearly new 25 H. P. White & Middleton Marine Gasoline Engine.

Mengel's Mach'y Exchange, 12 E. Lombard St., Baltimore Md.

FOR SALE.

Allis-Corliss Tandem Compound Engine, 20" high, 30" low, 42" stroke. Revs. 71 at 125 lbs. pressure. 400 H. P. First class condition. Now in operation.

LEONARD & McCAY,

161 Washington St., NEW YORK.

POWER HAMMERS

FOR SALE.

- 1 "Dupont" 50-lb. Head power hammer.
- 1 "Dupont" 150-lb. Head power hammer.

Grafton Sandersen, St. Johnsbury, Vt.

FOR SALE.

1 right hand Prescott band mill, 8 in. x 8 ft. 2 dynamos, 300 light capacity. 8 horizontal tubular boilers, with dome, size 5 ft. x 16 ft., 44 4-in. tubes. 1 fan, 9 ft., engine attached. 1 fan, 7 ft. belted. The above items are all in good order, and will be sold cheap for cash. For further particulars inquire of

YELLOW POPLAR LUMBER COMPANY,
COAL GROVE, OHIO.

Second-hand Dynamos, Motors and Electrical Appliances. All money savers. Repair anything. Have you a Dynamo or Motor for sale?

GUARANTEE ELECTRIC CO.

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If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4 a year.

Machinery Bargains.

We have stored at J. A. Waters & Co., Richmond, Va., the following machinery, on which we will make very low prices to close them out:

- 1 100 H. P. Sterling Water-tube boiler, fine order, complete.
- 1 8", 4 side, Inside Moulder.
- 1 10", 4 side, Inside Moulder.
- 1 12x20 Throttling Governor Engine.
- 1 Combination Brick and Tile Machine and cutting table.
- 1 Saw Mill, complete with engine.
- 1 42" Circular Resaw.
- 1 Wood Turning Lathe.
- 1 24" L. Power Single Surfer.
- 1 Practically New Combination Saw.

Cleveland Belting & Machinery Co.

8 Long Street, CLEVELAND, O.

FOR SALE.

ONE IRON SPAN DECK

PRATT TRUSS, 200 Feet Long,

Capable of Carrying Two 120-ton Locomotives.

This span is in good condition and can be re-erected with a very few repairs. It can be made into a through span at a small expense, as floor beams are of sufficient length. Blue prints will be mailed on application to the undersigned.

C. C. YEOMANS,

Purchasing Agent, C. B. & Q. Ry.
CHICAGO, ILL.

ENGINES—Compound.

- 1 14 & 25x16 Ball & Wood, self-contained.
- 1 14 & 23x16 Tandem Ames.
- 2 13 & 23x18 Tandem Williams.
- 1 13 & 20x15 Cross Armstrong & Sims.
- 1 13 & 19x15 Tandem McIntosh & Seymour.
- 1 12 & 21x16 Cross Erie Ball.
- 1 18 & 30x16 Westinghouse.
- 1 16 & 27x16 Westinghouse.
- 1 14 & 24x14 Westinghouse.
- 1 13 & 22x13 Westinghouse.

Simple.

- 1 18x18 Armstrong & Sims.
- 2 16x16 Ball & Wood.
- 1 15x14 Buckeye Tangye frame.
- 1 14x12 Buckeye Tangye frame.
- 1 14x16 New York Safety Power Co.
- 2 13x18 Harrisburg Ideal.
- 1 11x12 McIntosh & Seymour.
- 1 9x10 Armstrong & Sims.

BOILERS.

- 1 350 H. P. Franklin Water Tube, 140 lbs.
- 2 60x16 Return Tubular.
- 2 54x16 Return Tubular.

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17 Battery Place, New York City, N. Y.

BRANCH OFFICES:

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Fifty Whitin Welman Top Flat Cards, with 40 tops 40 ins. wide. Cylinder 42 x40 ins. Doffer 40x18 ins. Floor space 8 ft. 2 in. x 5 ft. 2 in., with collers. Production 125 lbs. per day. Some of these cards are only 3 years old, balance 8 years. They can be seen running. Also 150 sets Steel Clothing in extra good condition; 100 Doffers; 150 Mason Looms, 44"; 10 Ashworth Revolving Top Cards. For full information and price apply to

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Two Hot Blast apparatus made by American Blower Co., 48 inch wheel. 4000 feet piping; were new eight months ago.

Wm. E. Uptegrove & Bro.

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- 14 1/2"x24" Cooper automatic; two 14 1/2"x24" Porter Allen's; 14x24" Harris Corliss; 9x14" Atlas automatic; 12 1/2"x24" slide valve; 25 horse skid boiler and engine; 20 horse skid boiler and engine; 13 horse Russell traction; 10 and 12 horse portables; 10 horse vertical engine; 6 horse Scotch boiler and engine; 200 horse Stilwell & Bierce heater; heavy boiler plate punch, \$150.

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FOR SALE.

One Second-hand "BERRYMAN" HEATER AND PURIFIER in perfect condition and guaranteed good as new. Will sell cheap for cash. Address

M. F., care Mrs. Record,
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BOILERS.

- Four (4) 60"x16" R. T. (80 H. P.)
- One (1) 56"x14" R. T. (60 H. P.)
- One (1) 54"x13" Locomotive Portable (60 H. P.)
- One (1) 48"x12" R. T. (40 H. P.)
- One (1) 44"x14" R. T. (40 H. P.)
- One (1) 60"x7 1/2" Marine.
- One (1) 15 H. P. Portable on wheel

ENGINES.

- One (1) 23 1/2"x48" L. H. Harris Corliss (300 H. P.)
- One (1) 4 1/2"x4" Double Cyl. Automatic.
- One (1) 17 1/2"x20" Side Crank.
- One (1) 14 1/2"x24" Side Crank.
- One (1) 15 1/2"x36" Side Crank.
- One (1) 15 1/2"x34" Side Crank.
- One (1) 15 1/2"x24" Side Crank.
- One (1) 12 1/2"x28" Side Crank.
- One (1) 9 1/2"x12" Side Crank.
- One (1) 10 1/2"x12 1/2" Side Crank.
- One (1) 10 1/2"x16" Center Crank.
- One (1) 9 1/2"x12" Center Crank.
- One (1) 8 1/2"x12" Center Crank.
- One (1) 10 1/2"x12" Vertical Marine.

HOISTING ENGINES.

- One (1) 6"x8" Single Cyl., Single Drum (no boiler.)
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- One (1) 6 1/2"x8" Double Cyl., Double Drum (with boiler.)
- One (1) 6"x10" Single Cyl., Single Drum (no boiler.)
- One (1) 5"x7" Engine and Boiler.

HEATER.

- One (1) 50 H. P.

ROCK CRUSHER.

- One (1) 10"x16" Hoagland.

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- One (1) 15 H. P. Complete Rig.

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- One (1) Lane Rig Complete.

PUMPS.

We have a large assortment of second-hand steam pumps in good condition. Also a large stock of second-hand pipe, valves, fittings, shafting, boxes, hangers, pulleys, wheels and axles.

Write for detailed specifications and prices.

The

Cameron & Barkley Company,

Charleston, S. C.

LATHES FOR SALE.

Special Machine Shop Bargains.

Especially adapted for repair and jobbing work, turning shafting, etc.

A few sample lathes from our stock, which is as complete in smaller sizes, planers, drill presses, shapers, and in fact a general line of shop tools.

Send for Our Catalogue No. 6.

PRICE.	
No. 22,963—8 1/2" swing, 32' bed lathe.....	\$1500
No. 25,174—7 1/2" double bed drive wheel lathe.....	1250
No. 23,497—60" swing, 12' 2" bed lathe.....	550
No. 22,966—54" " 24" " ".....	700
No. 21,684—54" " 18" " ".....	600
No. 24,345—48" " 16" " ".....	450
No. 25,338—36" " 15" " ".....	375
No. 24,343—32" " 24" " ".....	375
No. 25,345—28" " 21" " ".....	375
No. 23,939—26" " 20" " ".....	500
No. 25,297—24" " 25" " ".....	575
No. 24,659—24" " 25" " ".....	475
No. 24,770—24" " 20" " ".....	375
No. 24,346—24" " 14" " ".....	250
No. 20,897—23" " 20" " ".....	500
No. 24,275—22" " 13' 3" ".....	250
No. 23,541—22" " 12" " ".....	225
No. 25,368—22" " 16" " ".....	225
No. 24,662—19" " 16" " ".....	375
No. 23,535—18" " 6" " ".....	135

Send for itemized descriptions of any one of the above, or will be glad to make price delivered at your railroad station if desired.

THE DREW MACHINERY AGENCY,

MANCHESTER, N. H.

FOR SALE.

100 H. P. Boiler and Engine. Also

35 H. P. Engine, almost new. Write

CRESCENT IRON WORKS,

NORFOLK, VA.

CHAS. T. LEHMAN, Birmingham, Ala.

Boilers, Engines, Machinery.
SECOND HAND. LOW PRICES.

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- One 10x14 Buckeye, R. H., thoroughly overhauled.
- One 16x36 Whitehill Corliss, L. H.
- Two 12x36 Hamilton Corliss, R. H. and L. H.
- One 12x24 Geo. H. Corliss, R. H. Bargains.

WASHINGTON COMPANY,

39 Cortlandt Street, NEW YORK CITY.

FOR SALE.

Immediate Delivery.

AIR COMPRESSORS.

- Two Rand Straight Line, "Class C," 18"x18"x24", One Ingersoll-Sergeant, Class "G," Duplex, 20"x30"x24".
- One Norwalk (2 stage) 14"x14"x9 1/2"x16".
- Two Rand Duplex (3 stage) 16"x14"x8 1/2"x4 1/2"x24".
- One Rand Duplex Corliss, 20"x30"x36".

BOILERS.

- Four Babcock & Wilcox Water Tube, 208 h. p. each, shaking grates.
- Eight Horizontal Return Tubular, 66"x16".
- Three Horizontal Return Tubular, 72"x16".
- Four Horizontal Return Tubular, 72"x16".
- Three Horizontal Return Tubular, 60"x16".
- Nine Horizontal Return Tubular, 72"x16".

ENGINE.

- One 30"x40" Buckeye, girder frame, band wheel in half, 12"x31" face.

LOCOMOTIVES.

- 36" gauge Locomotives.
- Four H. K. Porter 9"x14", saddle tank.
- Two Vulcan 9"x14", saddle tank, built 1900.

RAILS.

- 200 tons 30-lb. steel relays.
- 200 tons 33-lb. steel relays.
- 500 tons 56-lb. steel relays.

CARS.

- Eighty 80,000-lb. Ore Hopper Cars, made by Allison Mfg. Co.

PUMP.

- 1 Worthington Compound Duplex Condensing Pump, 25", 43"x17 1/2"x36", 30" suction and 18" discharge. Capacity, 3,000,000 gallons.

All of the above in A-1 order and ready for immediate delivery.

We buy and sell Air Compressors, Engines, Locomotives, Rails, Cars, Bridges, Boilers, Hoisting Engines and Pumps, etc. Complete plants purchased.

BOILER STACK.

1000 feet of 34" Boiler Stack, 5-16" material. This stack is first-class in every respect and will be sold at a bargain.

CYLINDER BOILERS.

8 Boilers, 40' long x 34" diam., good for 100 lbs. steam pressure, without fixtures or fittings. For quick sale will be sold cheap.

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222 South Third St., PHILADELPHIA, PA.

FOR SALE.

- 1 20x36x48 Cross Compound Corliss.....\$3250
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- 1 14x48 Corliss.....600
- 1 20x60 Corliss, first-class.....1000
- 1 500 H. P. Berryman Heater.....150
- 1 400 H. P. Knowles Comp. Jet Condenser... 250
- STEAM PUMPS, HEATERS, TRAPS.
- 1000' 1" Pipe in three coils, 1/2 net price new.
- 4 36" Davidson Vent. Fans.....\$25 each
- 1 No. 4 Pedrick & Ayre Compressor, used three months, \$350.
- 1 MORSE WILLIAMS ELEVATOR.....\$125
- 1 WHITTIER ELEVATOR.....125

F. H. DAVIS & CO.

63 State Street, BOSTON, MASS.

BOILERS!

Engines, Machinery in great variety at LOW PRICES.

Correspondence solicited by
FIDELITY MACHINE AND METAL COMPANY,
1406-22 Washington Ave., Phila.

FOR SALE.

- 1-54 in. x 12 ft. horizontal tubular boiler.
- 1-12x30 horizontal engine.
- 1-7 and 12x10 fore and aft marine engine.
- 6 steam pumps—all sizes.

E. J. CODD CO., Baltimore, Md.

FOR SALE.

Four boilers, 5 flue, 64"x28", 3/8" extra flange, Juniata steel, 3/4" heads with Reliance water columns, Rogers shaking grates, steam drums 36"x8", mud drums 20"x16", 5" safety valve, 1 equalizer 18"x38". These boilers are displaced to make room for new plant necessitating increased power. Are in good order and can be had at a bargain. Address LOUISVILLE COTTON MILLS CO., Louisville, Ky.

FOR SALE.

Immediate delivery at an attractive price.

48-in. Riveted Steel Pipe

1/2 and 3/4 inch in thickness.
E. KEELER CO., Williamsport, Pa.

FOR SALE.

- 1 18" Turret Lathe.
- 1 18" Engine Lathe.
- 1 14" Engine Lathe.
- 1 12x14 Upright Engine.
- 1 12x14 Atlas Engine.
- 3 Gasoline Launches.
- 1 6 H. P. Marine Engine.

Let us have your requirements. We can fill them.

PATAPSCO MACHINE & SUPPLY CO.
Baltimore, Md.

LATHES.

- No. 72 14"x5' Lodge & Shipley.
No. 73 14"x5' Lodge & Shipley.
No. 49 20"x10' Taper, Lodge & Shipley.

THE LODGE & SHIPLEY MACHINE TOOL CO.

CINCINNATI, OHIO,

U. S. A.

FANS.

Central station man's opportunity to increase the day load. We offer for immediate delivery, all f. o. b. Cincinnati, the following 125 cycle fans:

- 150 G. E. swivel and turn, 12 in., 104 volt., \$5.00 each.
150 Emerson solid, 12 in., 52 volt., \$3 each.
200 Westinghouse solid, 13 in., 52 volt., \$3.50 each.
100 G. E. swivel and turn, 12 in., 52 volt., \$4.00 each.

JOHN A. STEWART ELECTRIC CO.
428 Sycamore St., Cincinnati, Ohio.

CARLOADS

OF SECOND-HAND

Lathes,
Planers,
Shapers,
Drills,
Milling Machines,
Etc., Etc.

Just received. Reliable makes. All good serviceable tools.

WRITE FOR LIST.

THE GARVIN MACHINE CO.

Spring and Varick Sts., New York City.

Punches and Presses.

- One 1000-lb. Merrill drop hammer.
One 800-lb. Pratt & Whitney drop hammer.
One 500-lb. Pratt & Whitney drop hammer.
One 500-lb. Merrill drop hammer.
One 400-lb. Pratt & Whitney drop hammer.
One 40-lb. Bradley helve hammer.
One Shaw, Justice dead stroke hammer.
One Ferracute punch press, P-5.
One Ferracute punch press, P-3.
One Ferracute punch press No. 54.
One Ferracute cutting press No. 3½.
One Hibbard No. 21½ adjustable power press.
One Stiles open-back punch press.
One Saunders 6" power pipe machine.
One Bignall & Keeler 3" pipe machine.
One Pratt & Whitney No. 2 die-sinking machine.
Iron planers, 24", 22" and 18" between housings.

WICKES BROS.,
95 Liberty St., New York City.

Saw Mill Machinery, &c., for Sale.

Boilers—60x14 (2), 55x16, 42x10, return tubular.
Engine—Fussey & Jones 24x36, slide valve.
Pumps—Knowles 7½x4½x10, 6x4x7, and Selsby No. 4 rotary.
Shafting, Pulleys and Conveyors.

JAN. H. LINK MACHINERY CO.
WILLIAMSPORT, PA.

BARGAINS—CHEAP.

- One Deane Duplex Comp. Pump, 14x26x11x18.
One 30x13 Blake Pattern Crusher, nearly new.
Three Hoisting Engines. Rails, Locomotives.

L. E. KENNEDY & CO.

17 Broadway, New York City.

FOR SALE.

- 14"x6' Lodge & Barker Turret.
14"x54' Putnam R. & F. Rest.
15"x6' Porter R. & F.
15"x7' Pratt & Whitney R. & F. with Taper.
16"x10' Fay & Scott Cpd. Rest.
16"x8' Putnam Axle.
16"x6' Johnson Turret.
18"x8' Reed Plain.
18"x8' Lodge & Davis Cpd. & Taper.
18"x6' Lodge & Davis Chucking Lathe.
28"x8' Johnson Cpd. Rest.
36"x14' Betts Cpd. Rest.
No. 14 B. & O. Turret.
No. 2 B. & O. Turret.
No. 14 Garvin Forming Turret.

- 24" Cincinnati Triple Gear Shaper.
25" Prentiss Shaper.
25"x25"x6' Sellers Planer Spiral.
25"x25"x6' Whitcomb Planer—Spur.
30"x30"x6' G. A. Gray & Co.—Spur.
24"x42"x10' Whitcomb—Spur.

- 42"x42"x18' Betts—Spur.
6 Spindle B. & M.—Arch Bar.
No. 0 Bickford Radial Drill.
20" Hoefler Upright.
20" Barnes Upright.
3 Spindle Garvin Sensitive.

- No. 4½ Garvin Plain B. G. & A. F.
No. 2 Garvin B. G. & A. F.
No. 3 Garvin Plain B. G.
No. 2 Garvin Plain.
No. 2 Mitts & Merrill Keyseat Milling Machine.

- 36"x14' Pratt & Whitney Horizontal Boring Mill.
No. 3 Mitts & Merrill Little Giant Keyseat.
20" Stroke Morton Draw Cut Keyseat.
No. 2 Pratt & Whitney Cutting-Off Machine.
3 Wet Tool Grinders.
1 Wells Bros. Universal Cutter and Reamer Grinder.
1 Springfield Knife Grinder.
1 Cold Saw—19" Blade.
1 12" Lowell Slotter.
No. 103 Ferracute Power Press.
1 Emery Grinder, Iron Column & Counter-shaft.
1 Emery Grinder.
1 Magnetic Turning Separator.
1 Reed Speed Lathe.

BROWN & ZORTMAN MACHINERY CO.
Pittsburg, Pa.

2ND-HAND TOOLS.

- Lathes.**
12 in. x 4 ft. Hill Speed (2).
16 in. x 6 ft. Blaisdell R. & F.
18 in. x 8 ft. F. E. Reed.
18 in. x 8 ft. F. E. Reed.
20 in. x 4 ft. N. Haven P. B.
24 in. x 12 ft. F. E. Reed.
26 in. x 18 ft. Fitchburg blocks.
27 in. x 18 ft. Lawrence C. H. Axle Lathes, Bement (2).
- Planers.**
22 in. x 5 ft. Lawrence.
26 in. x 6 ft. Pond, Chuck.
30 in. x 8 ft. N. Y. S. E. Co.
48 in. x 16 ft. Sellers 2 H's.
- Shapers.**
16 in. Western Geared.
32 in. Hendey, New Vise.
- Drills.**
25 in. 1½ in. Gap Slide H'd.
36 in. N. H., complete.
Boiler Mkr's Suspension.
4 Spindles, heavy.
- Screw Mchcs.**
Nos. 0, 1, 2 and 3½ Antos, P. & W.
No. 2 B. & S. Automatic.
5-16 in. Spencer Auto. for Cyl's.
Hartford 2 in. and 1 in. Auto's.
No. 60 Garvin ½ in. W.F.
- Gear Cutters.**
30 in. Gould & Eber Auto.
0 in. Whiton.
35 in. Gould & Eber.
- Hammers.**
50 lb. Stiles Eric. Drop.
60 lb. Bradley Helve.
200 lb. Bradley Helve.
300 lb. Beaudry Upright.
350 lb. Merrill Board Drop.
- Miscellaneous.**
Grinder, Walker Univ. Cutter.
Grinder, 24 in. x 18 ft. Springfield surface.
Presses No. 18, 19 Blias.
Punch ½ x 1 in. Fowler.
Fox Lathe Sq. Arbor gage.
Oil Separator Am. No. 1.
Fire Welder No. 4, Long and Alls.
Rolls Sellers 14 ft. Ship plate.
Miller Lincoln, P. & W.
Miller Univ. No. 1 Garvin.
Miller Plain No. 2 Garvin.
Pattern Makers' Lathe, Greaves & Klus.
- Wood Wk'g Mchs. Cheap**
12 in. Smith Joiner.
4 Side Planers (2).
Cut Off Saw Greenlie.
16 in. Cigar Fox Planer, G. & W.
24 in. Band Saw, etc.

Write your requirements.

G. L. BENNETT, 113 Liberty St., New York

RAILS.

We own 1000 Tons 35 lb. First Class Re-laying Steel Rails with Fastenings, in East Texas, on 3 large Railroads. 8, 12, 16 and 20 lb. New Steel in our warehouse. 25 to 40 lb. New Steel in stock at Mill. New and Relay any weights.

Locomotives, Equipment and Supplies of all kinds.

WESTERN SUPPLY & MFG. CO.
East St. Louis, Ill.

FOR SALE.

17 NEW 36" gauge 30,000 lbs. capacity Flat Cars

For Prompt Shipment.

Kilby Locomotive & Machine Works,
ANNISTON, ALA.

FOR SALE.

75 K. W. direct connected set.
115 volts, excellent condition,

J. C. M. LUCAS,
22 Light Street, BALTIMORE.

Dredge for Sale.

A Lidgerwood 30 H. P. Portable Land Dredge, located in Missouri Is equipped with 1½-yard Hayward "Orange Peel" Bucket, 50-foot boom, of 12x12 fir; heavy "A" frame. All machinery, timbers, sheaves and appurtenances complete, in splendid condition, available for immediate delivery. Cost new \$3600. My price \$2200, loaded on cars shipping point.

WILLIS SHAW—MACHINERY—CHICAGO.

BARGAINS FOR QUICK DELIVERY.

- No. 3 Gates Crusher.
No. 3 Gates Crusher.
No. 5 Style B, Gates Crusher.
Double column Drop Hammer, cylinder 14"x36"; fine order.
Good Second-Hand Engines.
12-ton Kelly Roller, fine as new.
New Well Drilling Machine, cheap.
Marion AA Shovel, fine condition.

CONTRACTORS' SUPPLY & EQUIPMENT CO., { 232 Fifth Avenue, CHICAGO.

WE SELL
Engines, Boilers,
Pumps and Quarry
Supplies,
Concrete Mixers,
Horse Rollers,
Steam Drills,
Air Compressors,
Belting, Hose,
and a full line of
Contractors' Supplies.

SECOND-HAND

MACHINERY.

- 48"x24' Fifield Lathe, geared face plate.
Fine heavy screw-cutting tool
48x48" Gibson Planer, table 18', single head.
30x30"x8' Gray Planer.
24x24"x5' New Haven Planer.
18x18"x3' New Haven Planer.
18" Hendey Shaper.
20" Silvers Drill, power feed.
24" Prentice Drill, hand feed.
60" Box Radial Drill.
60-lb. Phillips & Justice Belt-driven Hammer.
2-ton Steam Hammer.
2½" Steam Hammer.
6 to 2½" Pipe Threading Machine.
2 to ¼" Pipe Threading Machine.
34" Bull Dozer.
72" Bending Rolls.
15" Alligator Shear, belt driven.
400-light Westinghouse Dynamo.
300-light Westinghouse Dynamo.
125-light Westinghouse Dynamo.
Engines, Boilers and Pumps, all sizes.
Send for our complete stock list.

WICKES BROTHERS

PITTSBURGH, PA.

For Sale—A Bargain.

One Brown Hoisting Machinery Company all iron and steel Post Jib Crane, 15-ton capacity, 35' 3" radius of hook, 18' 6" lift.

The hoisting mechanism is driven by dust-proof motor. The crane is in excellent condition and has been a very satisfactory machine.

A. GARRISON FOUNDRY CO.
Pittsburgh, Pa.

FOR SALE.

New I Beams and Channels cut to lengths for prompt delivery.
We are always in the market for Cylinder Boilers, Smoke Stacks, Flues and Second-Hand Pipe.
Also Scrap Iron and Steel in any quantity.

HENRY A. HITNER'S SONS,
Aramingo Ave. and Huntingdon St., Philadelphia.

FOR SALE.

- \$ 1 18x42 Left Hand Harris Corliss Engine.
" 1 20x48 Left Hand Hamilton Corliss Engine.
" 1 24x48 Right Hand Brown Corliss Engine.
" 1 250 K. W. General Electric Generator, speed 425, voltage 500.
" 1 200 K. W. Generator. 500 volts.
" 1 24x48 Left Hand Brown Corliss Engine.
" 1 16x42 Right Hand Hamilton Corliss Engine.
" 1 20x36 Porter Slide Valve Engine.
" 1 20x48 Left Hand Wheelock Corliss Engine.
" Write for full description.

Clyde Machine Works

39th and Union Ave., CHICAGO, ILL.

FOR SALE.

- One 1½-yard AA Marion Shovel.
One 23-ton Bucyrus Shovel, 1-yard dipper, Pittsburgh delivery.
One 45-ton Thew Automatic Shovel, 1½-yard dipper, Ohio delivery.
One Moore Trenching Machine, complete with buckets and 25 H. P. engine and boiler.
One 250-ft. Carson Trench Machine.
21 1½-yard Western Dump Cars (3 rotaries).
12 1½-yard Cars.
37 3-yard Western Dump Cars.
One Emerson Pump, 5" discharge.
Two Kitson Contractors' Lamps.
Two 25 H. P. Geyser Traction Engines.
70 tons 35-lb. Relaying Rail and Crossovers.

N. C. HEISLER & CO.

2304-68 Washington Ave., Philadelphia, Pa.

For Sale.

90 36 in. Franklin-Wellman Cards, 45 of the 90 newly clothed and in good condition.

6 Potter & Atherton 36 in. Lappers, 3 intermediates and 3 Finishers, all in fair condition.

6 Railway Heads.

2 Hardy Card Grinders.

Also Drawing for 90 cards.

Call early as we need the floor space.

Continental Manufacturing Co.
CHARLOTTE, N. C.

FOR SALE.

Several Hundred Tons of
¼ inch

Open-Hearth Tank Plate

63 x 156-inch.

E. KEELER CO., Williamsport, Pa.

New and Second-Hand Iron Tools and Woodworking Machinery

Corliss and Double Valve Engines for Trolley
Roads and Electric Lighting Stations.

H. C. BAKER & CO.

114 N. 3d Street, Philadelphia, Pa.

In Stock. Immediate Delivery. Rebuilt and Guaranteed.

20" x 40" x 60" Cross Compound Corliss. 28" x 60" Wetherill Corliss. 26" x 60" Wetherill Corliss. 21" x 42" Rickards Corliss. 30" x 45" Frick Corliss. 18" x 24" Slater Automatic. 22" x 33" Watertown. 18" x 24" New York Safety Vertical. 16" x 27" x 16" Westinghouse Compound. 14" x 24" x 14" Westinghouse Compound. 12" x 22" x 20" Porter-Allen Automatic. 3 1/2" x 20" x 12" Westinghouse Compound. 16" x 36" Wetherill Corliss. 16" x 42" Harris Corliss. 16" x 16" Green Automatic. 15 1/2" x 15" Armstrong & Sims. 15" x 30" Buckeye. 15" x 20" Russell Automatic. 15" x 18" Taylor-Beck Automatic. 15" x 16" Ball Automatic. 14 1/2" x 15" Armstrong & Sims. 14 1/2" x 15" McIntosh & Seymour. 13" x 12" Armstrong & Sims. 13" x 14" Vertical Fitchburg Automatic. 12" x 24" Buckeye Automatic. 12" x 15" Ide Automatic. 12" x 12" Armstrong & Sims. 12" x 12" Adams Automatic. 12" x 12" Chandler & Taylor Automatic. 10" x 16" Buckeye Automatic. 10" x 15" Atlas Automatic. 3 7/8" H. P. Westinghouse Standard Automatics. 2 5/8" H. P. Westinghouse Juniors. And many others. Stock is constantly changing. Let me have a list of your wants.

BOILERS.

2 66" x 18" Horizontal Tubulars, 125 lbs. steam. 6 66" x 16" Horizontal Tubulars, 120 lbs. steam. 2 150 H. P. Wood Water Tube, practically new. Large stock of new and second-hand Horizontal, Vertical and Locomotive Boilers. 2500 H. P. Gouvert Heater. 3 500 H. P. Berryman Heaters. 60 large Steam Pumps, up to 12" suction. Assorted sizes. 50 H. P. Otto Gas Engine. 40 H. P. Otto Gas Engine. Large stock of Dynamos, Iron and Wood Working Machinery. Send for Special Catalogue of 2300 pieces.

FRANK TOOMEY,

127-131 N. Third St. Philadelphia, Pa.

WANT TO SELL.—150 H. P., 6 1/2", 3 1/2" and 5 1/2" up to 80 H. P. Horizontal Return Tubular Boilers. 100 lbs. steam and better. 150 H. P. Vertical boiler, complete; also, 1 1/2" H. P. NEW, never used, complete. 1 1/2" H. P., also several larger ones. 1 1/2" H. P. Gasoline Engine. 1 1/2" H. P. Hor. R. T. Boiler. 1 1/2" H. P. Center Crank Engine. 1 1/2" H. P. Self-contained Center Crank. 1 1/2" H. P. Side Crank. 1 1/2" H. P. Center Crank. 1 1/2" H. P. Slide Crank. Hor. Slide Valve Engine. 1 1/2" x 10 Erie Ball Automatic Engine. 3 1/2" H. P., 2 1/2" H. P., 2 1/2" H. P., 4 1/2" H. P. and 7 1/2" to 25 H. P. Vertical Engines, excellent condition. 1 1/2" ton Dugdeons Improved Hydraulic Jack. 1 1/2" H. P. Coal Oil Engine and Boiler, complete. 1 1/2" ton Electric Crane. 10 K. W. Motor, used one week. 2 G. & C. Vacuum Pumps, 14x10x9, 12x10x9. 1 1/2" D. C. S. D. Lidgerwood Hoister. 9 1/2" x 10 ft. long Hor. Return Tubular Boilers. 1 No. 3 Dallet Portable Drill, complete. 1 16x10x24 Single Pump; 16x10x16 Knowles. 1 12x8x12 and 1 12x7x12 Single Knowles Pumps; also lot of Tank Pumps, duplex and single; Motors, Dynamos, Tanks, Wire Rope, Cable, etc.

WANT TO BUY.—1 500 H. P. or 2 250 H. P. each Vertical Water Tube Boilers. 3 30 to 60 H. P. Vertical Boilers. Lot of High Pressure and Tank Pumps; Wire Cable, 1 1/2" to 3 1/2" inclusive; Pipe, and ANYTHING YOU HAVE TO OFFER, must be SECOND-HAND.

ANTHRACITE MACHINERY & SUPPLY CO.
Long Distance Telephone. ALLENTOWN, PENNA.

FOR SALE.

DAVIS CALYX DRILL.

Class F, with appurtenances and 10 H. P. locomotive type Boiler on wheels, to run drill.

This drill is used for exploiting for minerals and for driven wells, and is very complete in all its appurtenances. It has been in use about ten months with best of care, and was new when purchased. Its capacity is guaranteed for 600 feet, but will bore deeper with sufficient drill rods. It cuts a 4 1/2" hole and 3" core; 306 feet of drill rods, 131 feet of 5" extra black pipe for casing. Drive head and shoe. This drill gave entire satisfaction, and in our opinion is superior to a diamond drill. We are selling because of retirement from business. Cost complete over \$1800. Will sell for \$900 f. o. b. cars Sylva, N. C.

R. L. MURRAY, Waynesville, N. C.

FOR SALE.

Five Blowing Engines.

36" Steam Cylinder, 84" Air Cylinder, 54" Stroke. Engines were built by Cuyahoga Engine Works and can be seen in operation at our plant at Columbus, Ohio. Can be delivered about Jan. 1st.

The Columbus Iron & Steel Co.
COLUMBUS, OHIO.

FOR SALE.

1 22x32 R. H. Watts Campbell Corliss Engine. 1 10x12 Ideal Automatic Engine. 1 10x7x10 Worthington Duplex Pump. 1 15 ton Road Roller for sale or rent. 1 Little Giant Steam Shovel. 1 10x7x10 Worthington Duplex Pump. Iron Tanks, 300 to 1000 gallon capacity.

JAS. S. BRADEN, 26 Cortlandt St., New York.

FOR SALE.

\$75,000 worth of new leather belting, single and double, from 1" to 24" wide, which is somewhat stock worn but brand new, having never been used, for all practical purposes as good as the day it came out of the shop. We are selling it as second-hand belting. It was built by one of the best belt manufacturers in the United States. We offer it in quantities to suit buyers. Write for prices.

L. P. SEYFERT'S SONS,
437-441 N. Third Street, PHILADELPHIA.

HOISTING ENGINES and MACHINERY.

One Lidgerwood No. 120, 8 1/2" x 10 cylinders. One Lidgerwood No. 72, with simplex swinging gear. One 7x12 single cyl., single drum, with boiler. One 5 1/2" x 10 single cyl., single drum, without boiler. 12 small Stationary Engines 5 to 40 H. P. CONTRACTORS' BOILERS, DERRICKS.

Contractors' Supply Co., Park Bldg., Pittsburg.

FOR SALE

Locomotives, New and 2nd Hand. Cableway 600 feet long complete. 200-ton 56 lb. Relaying Rails. 40-ton 70 lb. Relaying Rails. 45-ton 25 lb. Relaying Rails. 80-ton 80 lb. Relaying Rails. New Rails, all weights. 1 1/2-yd. Marion Improved "A." 1 1/2-yd. Bucyrus, 45-ton.

CLARK & HINES

Baltimore, Md.

R. R. Equipment, Mine and Contractors' Supplies.

FOR SALE.


STANDARD GAUGE PRIVATE HORSE OR STOCK CAR, adjustable stalls for carrying sixteen heads, complete in every detail, in first-class condition. BALDWIN STANDARD GAUGE DUMMY LOCOMOTIVE, 9x12. Has been thoroughly overhauled and put in first-class condition.

Both of the above will be sold at a low price.

POULTERER & CO.

410 Bullitt Building. PHILADELPHIA, PA.

FOR SALE.

 Light T Rails AND Dump Cars For Contractors' Use.

35, 30 and 60-lb. Steel Relaying Rails, Flat Cars, etc.

MAY & SPALDING, ATLANTA, GA.

FOR SALE-LOCOMOTIVES.

Baldwin 56-ton Consolidated, cyls. 20x24, first-class. Baldwin 50-ton Mogul, cyls. 18x24, first-class. Baldwin 22-ton 4-Driver, saddle tank switcher, 2-wheel front truck, cyls. 12x18; just overhauled. Porter 3-foot Saddle Tank, 6-driver, cyls. 10x16, weight 17 tons, very good order, quick delivery. Many other Engines, various gauges, geared and straight connected. Write for prices. THE MALES CO., 236 Broadway, New York, N. Y.; 713 Traction Building, Cincinnati, O.

NEW STEEL RAILS.

We have a large quantity of steel, A. S. C. E. section, various weights, with or without fastenings, for immediate or future delivery. Also have "seconds" for sale.

O. W. DAVIS & CO., 68 Wall St., New York City.

FOR SALE.

NEW STEEL RAILS.

12, 16, 20, 30, 35 and 40 lbs., with splice bars, bolts and spikes. Immediate shipment from stock.

JOHN J. HAMEL & CO.

House Building. PITTSBURGH, PA.

Locomotives, Cars, Steam Shovels.

7 Standard Gauge Passenger Cars for sale or lease.

Locomotives, Stand. or Narrow Gauge.

The Cincinnati Equipment Co.

Works, Cullom Sta. CINCINNATI, O.

FOR QUOTATIONS ON

New and Relaying Rails

OF ALL SECTIONS, WRITE

Cohen-Schwartz Rail and Steel Co.

ST. LOUIS' LARGEST SCRAP IRON HOUSE.

Office and Plant Wharf 1, Block South of Tyler St.

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Alabama Frog & Switch Co.

ANNISTON, ALA.

Manufacturers of

Railroad Crossings, Frogs,

Switches, Switch Stands, Rail Braces, Etc.

MANUFACTURERS

Light Steel Rails,

12, 16, 20, 25, 30 and 35 lbs. with splices.

Prompt delivery.

Maryland Rail Co.

CUMBERLAND, MD.

CONTRACTORS' MATERIAL.

One 9x14, 36" gauge saddle tank locomotive. One 10x16, 36" gauge locomotive with tender. Three 16x24 standard gauge with tender. One 10x12 S. G. Baldwin dummy type locomotive. One 8x16, 42" gauge saddle tank; also 7x12 same gauge. One Marion style A shovel with 1 1/2 yd. dipper. One Vulcan shovel with about 1 1/2 yd. dipper. Giant B. style. One 24" gauge locomotive and 18, 24" gauge cars; fine order. One 36" and standard gauge cars all sizes and also rail. One Smith concrete mixer on skids, steam engine attached. 1 Pile driver, 1 Flory engine and boiler. 1 Orange pool dredge complete with 2 1/2 yd. buckets. Centrifugal and steam pumps, wheel scrapers, slips, dynamo, etc. NOTE: We will RENT you a complete CONTRACTORS PLANT if you do not wish to purchase outright.

HARPER MACHINERY CO.

Park Row Bldg., N. Y.

Yards and Shops, Newark, N. J.

J. E. FRANKS

SAVANNAH, GA.

RAILS, CARS and LOCOMOTIVES, FROGS, SWITCHES, Etc.

Locomotives and Cars for Sale.

One 14-ton Baldwin, rear tank, standard gauge. One 8-ton 7x12 Porter 4D Saddle Tank, 42" gauge. One 17-ton Climax Geared, 36" gauge. Five Climax logging cars, 36" gauge. Steam shovels, hoisting engines, etc.

THE EDGAR S. LOW CO.

Empire Building. PITTSBURGH, PA.

RAILS-LOCOMOTIVES.

400 tons 35 and 40-lb.; 2000 tons 56-lb.; 600 tons 60-lb. steel relay rails.

Locomotives—Narrow and standard gauge. 50 locomotives on hand.

Southern Iron and Equipment Co. ATLANTA, GA.

FOR SALE.

New Steel Tee Rails

60 to 80 lb. A. S. C. E. section.

Delivery guaranteed.

RAILWAYS BUILT and FINANCED.

C. H. RUTTER, Easton, Penna.

LOCOMOTIVE CRANES.

1 New 15-ton Locomotive Crane, immediate delivery.

1 New 10-ton Locomotive Crane, immediate delivery.

THE BROWNING ENGINEERING CO.

Lock Drawer "Q," Cleveland, O.

FOR SALE-RAILS.

For immediate shipment from stock, 8, 12, 16, 20, 30, 40, 70, 75, 80 and 85-lb. New Rails. Also 20, 25, 30, 40, 50, 55 and 60-lb. Relays, for prompt shipment. Cut Rails a Specialty.

RICHARDSON & CO., Inc.

300 Ninth Street, PITTSBURGH, PA.

40-Pound Relay Steel Rail.

200 tons for sale cheap.

WALTER A. ZELNICKER SUPPLY CO.

Department M. In St. Louis.

Shall we send you our Daily

Rail and Equipment Bulletin?

FOR SALE.

1 Locomotive, 36" gauge, 11x16, 15-ton capacity. 9 Box Cars, 54' long, 60,000 lbs. capacity. 30 Box Cars, 30' long, 40,000 lbs. capacity. 200 tons 56-lb. Steel Relays. 150 tons 60-lb. Steel Relays. 50 tons 53-lb. Steel Relays. Also New Rails, 8 to 40 lbs.

L. WOLF & BRO.,

50-51-52 Mitchell Bldg., CINCINNATI, OHIO.

STEEL RAILS.

New and Relaying Rails, all weights, for prompt shipment. Frogs, Switches and Crossings. Write us for prices.

STRINGFELLOW & WEBSTER,

RICHMOND, VA.

STEEL RAILS.

NEW AND RELAYING AND ALL ACCESSORIES. Frogs, Switches, Crossings, Etc.

GEORGE H. CAREY,

1 Broadway, NEW YORK.

OUR BARGAIN LIST OF MATERIAL.

When you are in the market for Supplies of any kind, consult us before placing your order. Our establishment is the LARGEST in the world. Our Main Buildings and Warehouses cover 20 acres of land. All of the material that we offer for sale is in our stock ready for immediate delivery.

If you are in a special rush for any material, telegraph us at our expense for quotations. We invite you to call and inspect our Institution when in the city. Five long-distance 'phones, all Yards 827. We use Western Union and A. B. C. codes.

RADIATION.

50,000 ft. factory radiation, sizes from 25 to 200 sq. ft. of heating surface each; for single and two-pipe systems. All shapes. Price per square foot heating surface, 15 1/2 cts.

PIPE.

Our stock consists of the following quantities. It is all in good condition, ready for immediate use; re-threaded, new couplings: 50,000 ft. 3/4 in. 8,000 ft. 6 in. 68,000 ft. 1 in. 1,000 ft. 7 in. 110,000 ft. 1 1/4 in. 2,000 ft. 8 in. 8,000 ft. 1 1/2 in. 300 ft. 9 in. 45,000 ft. 2 in. 1,500 ft. 10 in. 87,000 ft. 2 1/2 in. 1,400 ft. 12 in. 4,000 ft. 3 in. 400 ft. 14 in. 13,000 ft. 4 in. 400 ft. 16 in. 2,000 ft. 5 in. 250 ft. 18 in.

Also 150,000 ft. 3/4-in. light-wgt. pipe; per ft., 11 cts. 165,000 ft. 4-in. light-wgt. pipe; per ft., 15 cts.

BELTING.

A large stock of first-class, fine second-hand Leather Belts. They are rebuilt, that is, they have been taken apart and put together the same as a new belt, and we ship them under the binding guarantee that you will find them entirely satisfactory; if not, we will take them back from you. Can furnish you single or double thick belts in any width desired at a discount of 80 and 10 per cent. from prevailing Standard List.

Also a quantity of high-grade guaranteed Rubber Belts, any width or ply, for immediate shipment. Telegraphic orders filled same day received. Discount—75 and 10 per cent. from prevailing Standard List.

PULLEYS.

Three carloads of new wood-splitted pulleys, ranging from 30 to 96 in. dia., and very nearly any size face. Discount, 85 per cent. from prevailing List, for immediate acceptance only.

MANILA ROPE.

A carload of fine used Manila rope, highest grade, ranging from 1/2 to 2 inch. Per lb., 7c.

IRON ROOFING.

2400 squares of good second-hand galvanized-iron roofing in heavy gauges running about No. 22. Sheets are miscellaneous sizes. It is practically free from nail holes; has been nicely trimmed; 2 1/2 inch corrugated, and is perfectly serviceable for further use. Price per square, \$3.00. Also—1400 squares same as above in black steel. Price per square, \$2.50. Also new roofing.

FELT ROOFINGS.

10,000 rolls of new high-grade felt coverings. It is perfect material, fully guaranteed. We offer: 2 ply, per sq., \$1.15. Vulcanite, per sq., \$1.50. 3 ply, per sq., \$1.35. Rubberoid, per sq., \$1.75. Samples on application. Special prices in large lots.

VALVES.

250 fine second-hand Globe, Angle, Check, Gate and pressure valves; sizes 2 1/2 to 14 inch. These valves are perfectly tight, and are guaranteed. We will save you at least 50 per cent.

BOLTS.

Two cars of new mixed bolts—machine, plow, etc. All sizes and diameters; put up in kegs. A handy assortment. Price per pound in 1000-pound lots, 2 1/2 cts.

INCANDESCENT LAMPS.

Guaranteed new; put up 250 in original barrels just as they came from factory. They are not refilled, but are sold to you with the understanding that if, upon trial, you do not find them satisfactory, that we will give you authority to return them to us at our expense for return charges. Can furnish voltages 100 to 115; candle-powers 8, 10, 16, 20 and 25. Bases, Edison and T. H. We name you price on these lamps in barrel lots, with Edison base, each 9 1/2 cts. T. H. base, each 10 1/2 cts.

WIRE ROPE.

We have in stock a quantity of fine second-hand wire rope, six strands, 19 wires to the strand, which has not seen excessive service, and which is in first-class condition for further use:

65,000 ft. 1 1/4 in., 12c. p. ft. 1 1/2 in., 13c. p. ft. 42,000 ft. 1 3/4 in., 11c. p. ft. 2 in., 15c. p. ft. 13,000 ft. 1 1/2 in., 14c. p. ft. 2 1/4 in., 21c. p. ft.

In addition to the above, we have all sizes of cable, ranging from 3/4 inch up.

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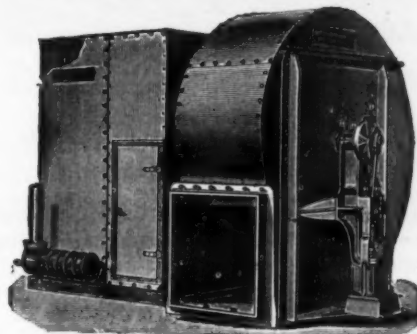
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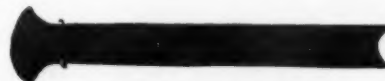
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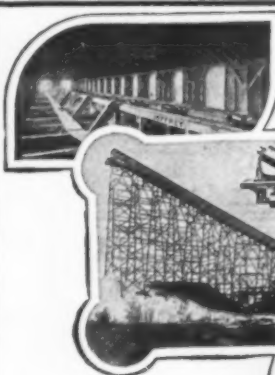
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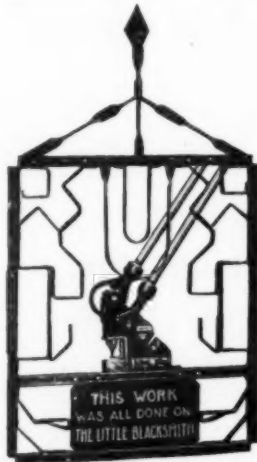
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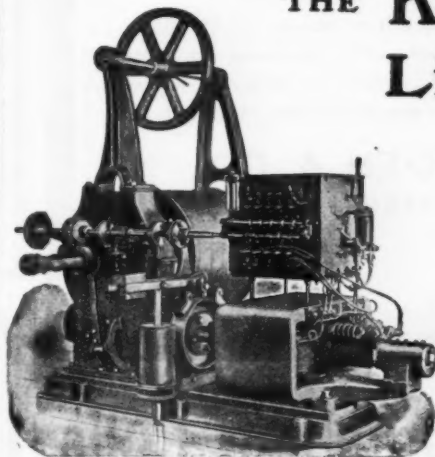
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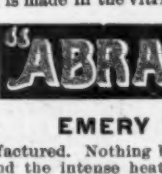
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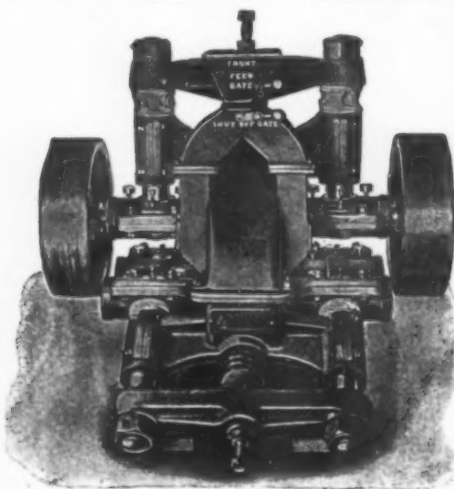
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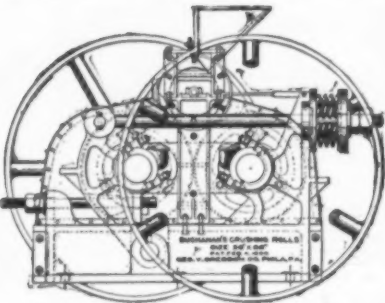
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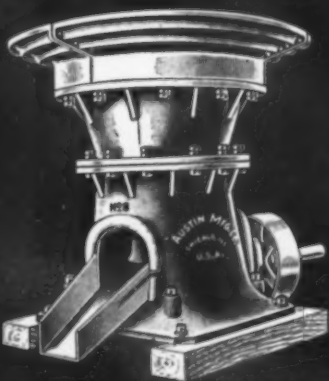
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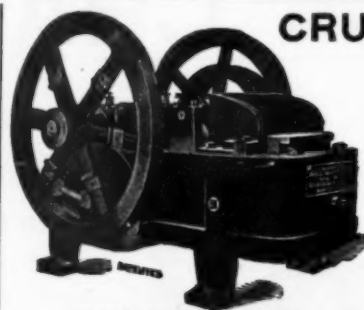
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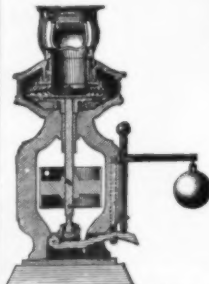
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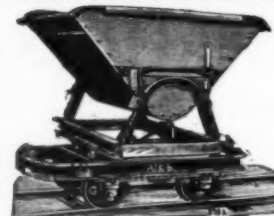
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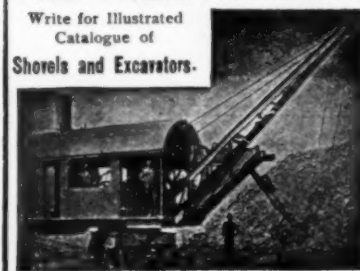
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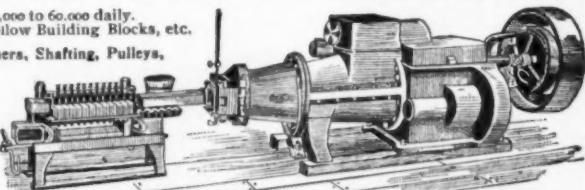
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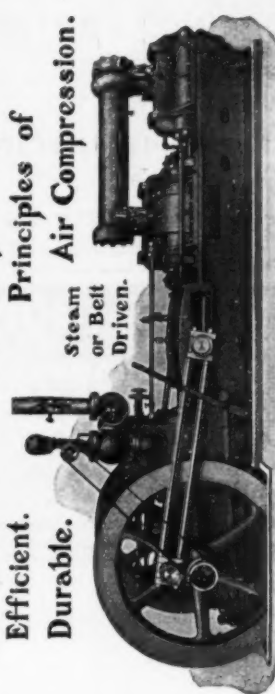


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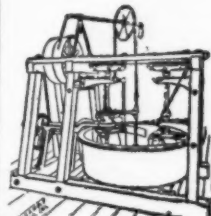
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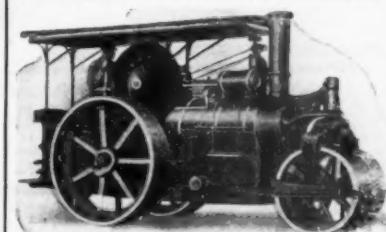
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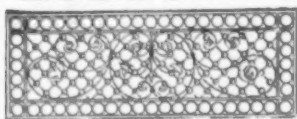
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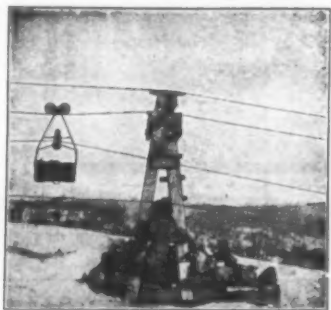
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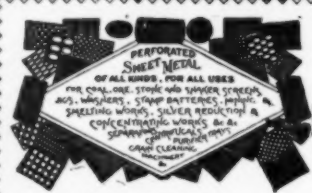
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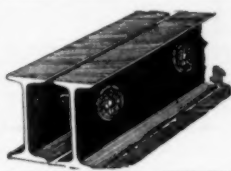


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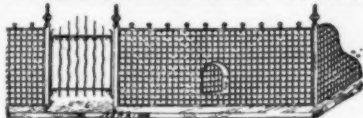
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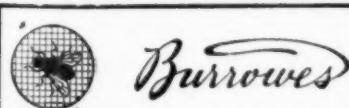
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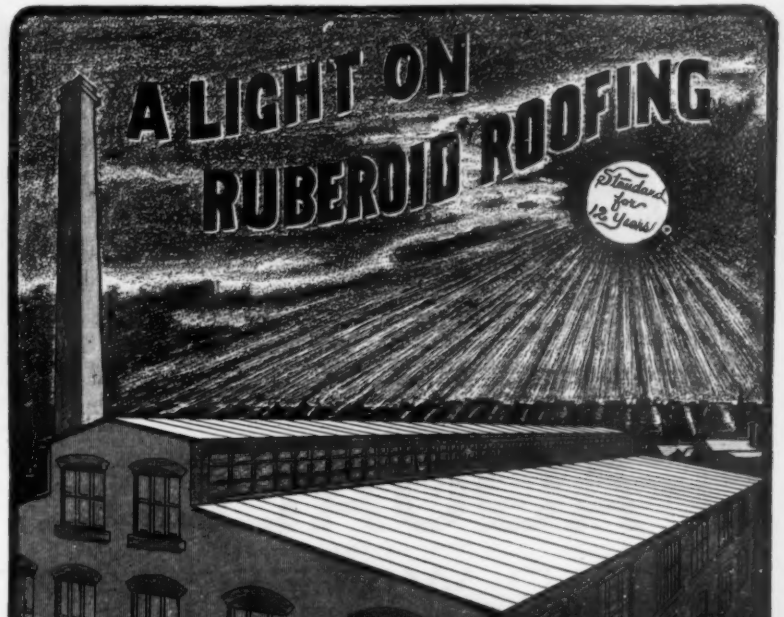
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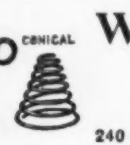
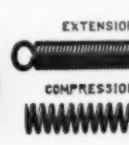
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8-in.	22 1/2 "	10-in.	15 "		
9-in.	21 "	12-in.	20 1/2 "		
9-in.	25 "	15-in.	30 "		
10-in.	25 "				
10-in.	30 "				
12-in.	31 1/2 "				
12-in.	40 "				
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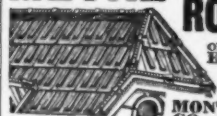
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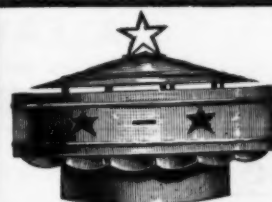


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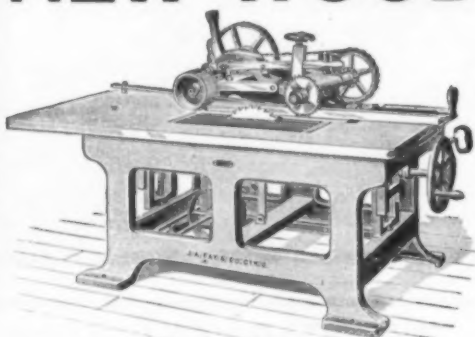
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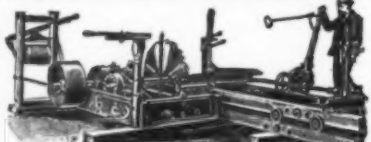
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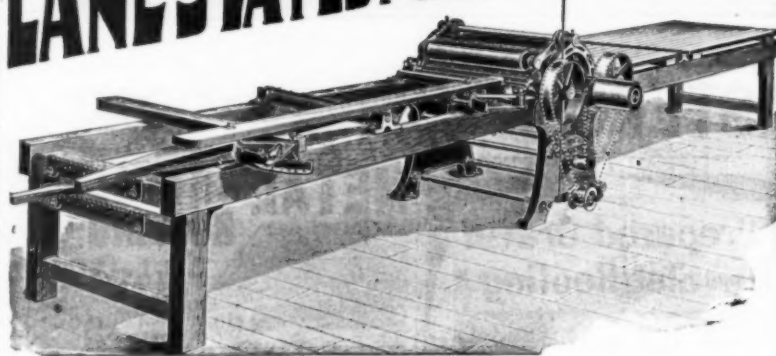
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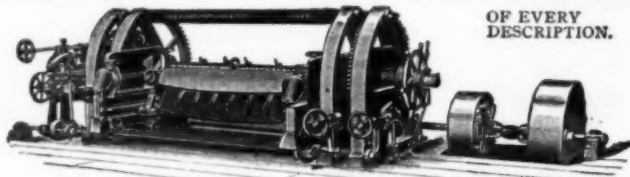
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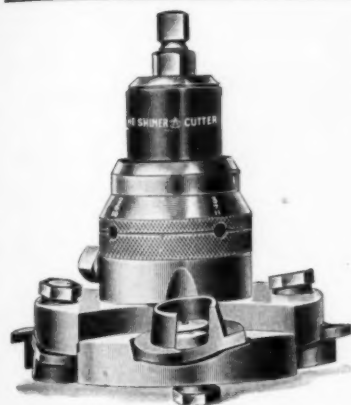


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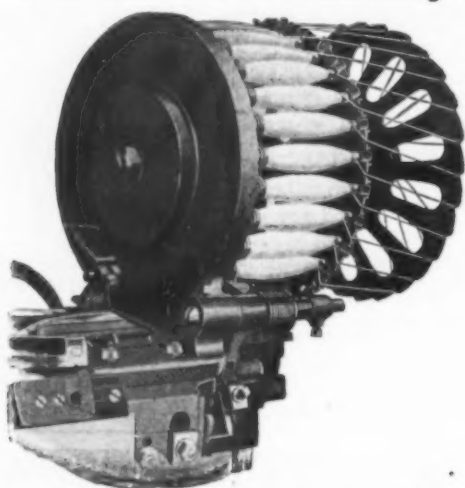
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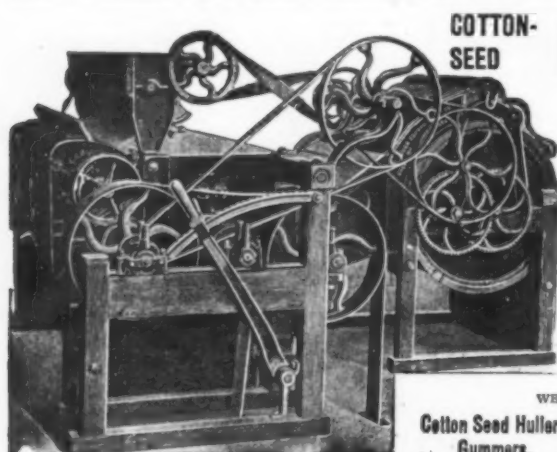
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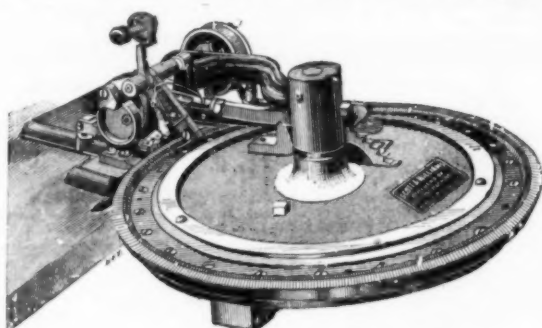
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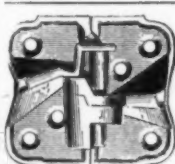
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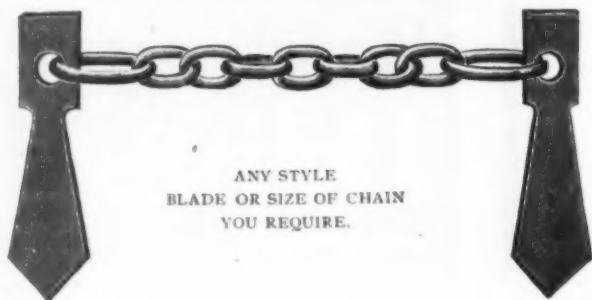
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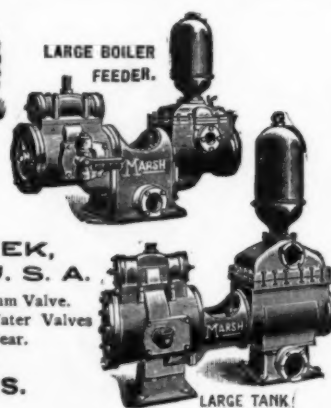
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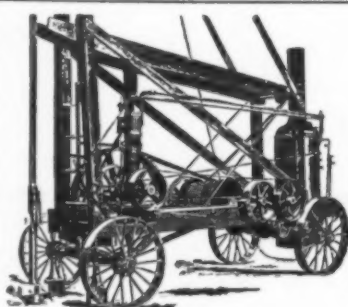
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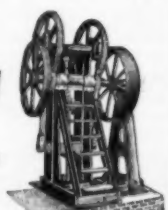
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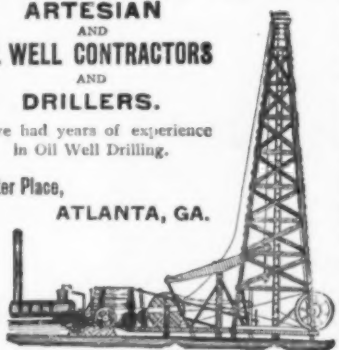
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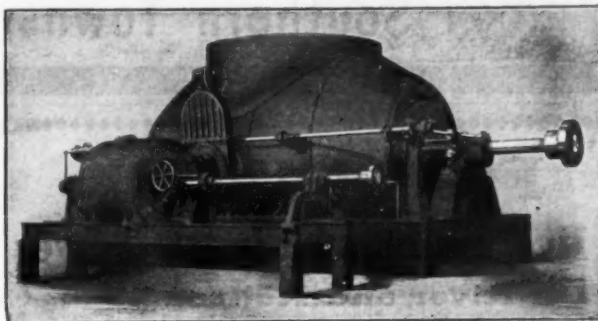
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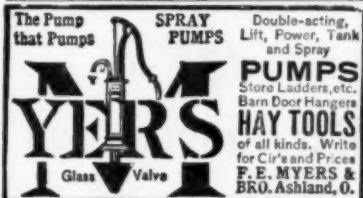
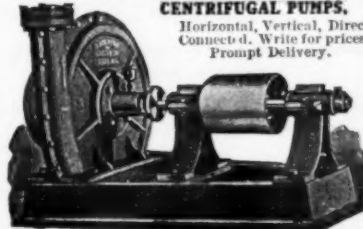
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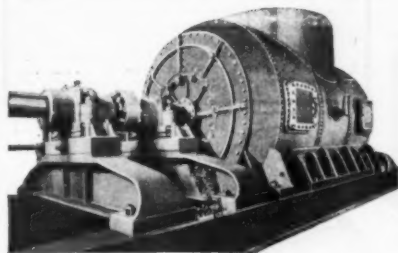
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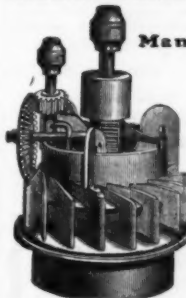
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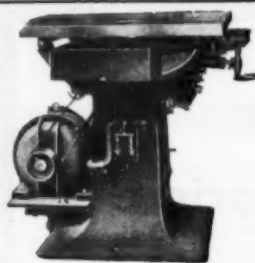
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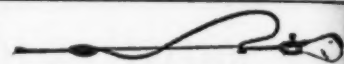
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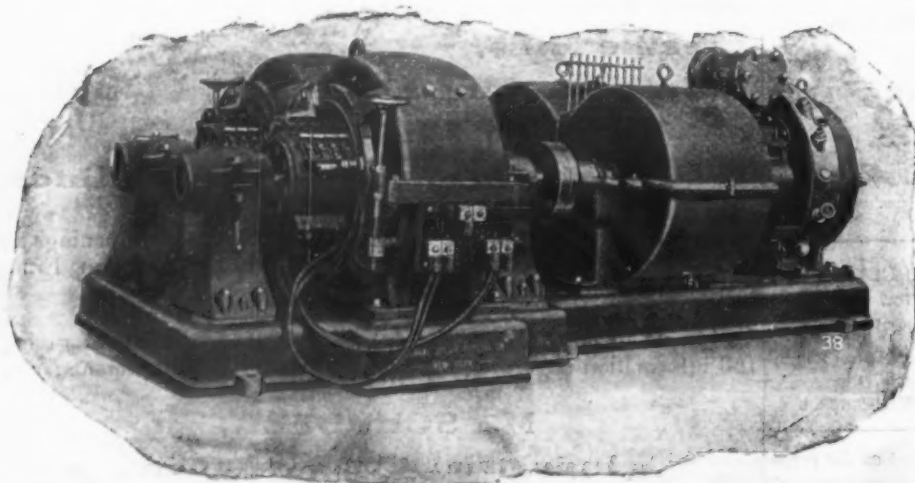
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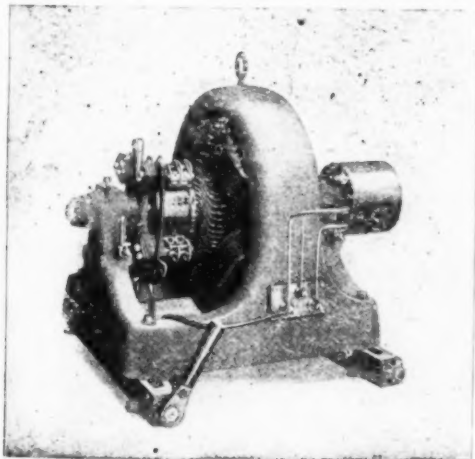
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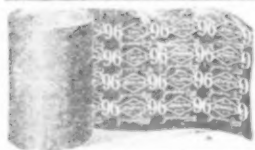
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